EXHIBIT H

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

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IN THE MATTER OF:	
CUTTING EDGE VISION, LLC, an Arizona Limited Liability Company, Plaintiff,	
v.	Case No. 6:24-CV-270-AM-DTG
T-MOBILE US, Inc., and T-MOBILE USA, Inc., Defendants.	

Friday,
March 14, 2025

DEPOSITION OF:

DR. ANDREW WOLFE

called for examination by Counsel for the Plaintiff, pursuant to Notice of Deposition, via Video Teleconference, when were present on behalf of the respective parties:

APPEARANCES:

On Behalf of the Plaintiff:

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CONTENTS

WITNESS	DIRECT	CROSS
Andrew Wolfe	5	154

EXHIBIT NO.		PAGE
1	Expert Declaration of Wolfe	15
2	U.S. 10,063,761	31
3	U.S. 11,153,472	57
4	Hughes Declaration	38
5	CEV-TCL 23-02-02 Preliminary Claim Construction Order	57
6	U.S. Patent 8,508,498	70
7	U.S. Patent 7,555,006	70
8	Pages from CEV-T-Mobile File History 10,063,761	77
9	11,153,472 Preliminary Amendment From 19-10-25	84
10	U.S. Patent 8,838,370	92
11	JavaScript if else if else	103
12	U.S. Patent 8,726,043	106
13	IPR2020-00234 Declaration of Wolfe Re 8,847,898 Samsung v Neodron	110
14	U.S. Patent 8,243,045	117
15	If statement in Programming GeeksforGeeks	123

P-R-O-C-E-E-D-I-N-G-S

(9:01 a.m.)

COURT REPORTER: We are now on the record. Here begins the deposition of Dr. Andrew Wolfe, taken in the matter of Cutting Edge Vision LLC vs. T-Mobile US, Inc. and T-Mobile USA, Inc., Case No. 6:24-CV-270-AM-DTG. We are convened remotely via Zoom. My name is Eric Mollen. I'm the court reporter from Neal R. Gross and Company. Today's date is Friday, March 14th, 2025, and the time is 9:02 a.m. Pacific. Would all present please introduce yourselves and whom you represent for the record?

MR. LESKO: Good morning. My name is Justin Lesko, and I'm here on behalf of the Plaintiff, Cutting Edge Vision, LLC.

MS. LISA: Hello, I'm Michelle Lisa, and I'm also here on behalf of Plaintiff Cutting Edge Vision, LLC.

MS. WEISKOPF: I'm Elizabeth Weiskopf from K&L Gates, on behalf of the witness and the T-Mobile Defendants.

MR. LESKO: Okay, great. So, Dr. Wolfe, I'm going to start with a few ground rules for today's deposition.

COURT REPORTER: Actually, Mr. Lesko --

DR. WOLFE: Do you want to swear me in?

COURT REPORTER: Yes, I should swear him in.

MR. LESKO: Sorry.

COURT REPORTER: Dr. Wolfe, would you raise your right hand, please?

WHEREUPON,

ANDREW WOLFE

was called as a witness by Counsel for the Plaintiff and, after having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

MR. LESKO: Okay. Dr. Wolfe, I'm going to start with a few ground rules. I'm sure you've heard these before but we still want to go through them. So first, for today's deposition, you should only have the Zoom meeting, the documents folder -- actually, let me ask you first. Do you have access to the folder of documents that I sent to Ms. Weiskopf?

THE WITNESS: No.

MR. LESKO: Okay. Can we go off the record here?

COURT REPORTER: Yes, we're off the

record.

(Whereupon, the above-entitled matter went off the record at 9:04 a.m. and resumed at 9:05 a.m.)

COURT REPORTER: All right. We're back on the record at 9:05 a.m.

MR. LESKO: Okay, Dr. Wolfe, I'm going to start with some ground rules here. First, during the deposition, you should only have the Zoom meeting, the documents folder and any other document that we are discussing during the deposition on your screen. Can you confirm that you agree with that?

THE WITNESS: Yep. That's fine.

BY MR. LESKO:

Q And currently, do you have anything else open on your computer aside from the documents folder and the Zoom meeting?

A I'm not sure what you mean by open, but I only see the Zoom window and the documents folder. I mean, I guess I have I still have a web browser open to the Box.

Q Okay. So you have a web browser to Box and the folder and the Zoom meeting and nothing else is on your computer right now, like, that's

usable.

A I mean, I'm sure there's stuff running in the background, but there's nothing else that I can see.

Q Okay. And throughout the deposition, you cannot have any chats open with colleagues or with Ms. Weiskopf. Do you agree with that?

A I'm not sure what the rules are. I mean certainly don't have any communications with anybody while we're on the record.

Q Yeah. Can we just agree that we're not going to have any communications like that while we're on the record? It's just hard because we're in a Zoom meeting. I want to make sure.

A No, that's fine.

Q Okay. And I'll ask some of my questions slowly. Can you please let me finish the question before answering?

A I will do my best.

Q Okay. And if you don't understand a question, will you let me know, and then I'll try to rephrase it for the record?

A I will try to do that.

Q And if you answer a question, I'll assume you understood the question. Is that

okay?

A Okay.

Q And if you need a break at all during the deposition, you can request one, but please try to answer any pending question before we try to take a break.

A Okay.

Q Is there any issue today, such as an illness or a personal issue that would impair your ability to testify fully and accurately today?

A Not at the present time.

Q Okay. Can you please state your full name and address for the record.

A Andrew Wolfe. Do you want the address of my office where I am right now or do you want my home address?

Q Your office address is fine.

A 2005 De La Cruz Boulevard, Suite 142, Santa Clara, California 95050.

Q Okay. And you have submitted a claim construction declaration on behalf of T-Mobile US, Inc. and T-Mobile USA, Inc. in this matter, is that correct?

A Yes.

Q And for convenience during our deposition, I'll refer to the Defendants collectively as T-Mobile and to the Plaintiff as CEV. Is that okay?

A I will understand that.

Q Thank you. So in preparing for today's deposition, did you review your declaration that we just mentioned in this case?

A Yes.

Q In preparing for today's deposition, did you review the declaration of Dr. Hughes?

A Not since I wrote my declaration, no.

Q Okay. And in preparing for today's deposition, did you review the patents at issue in this case, U.S. patent numbers 10,063,761 and 11,153,472?

A Yes.

Q In preparing for today's deposition, did you read the file histories of either of those patents?

A Portions of it. I pulled it up online at the Patent Office, and I read the portions that I thought would be relevant.

Q Okay. In preparation for today's deposition, did you read Plaintiff's Proposed

Constructions dated January 3rd, 2025?

A No.

Q And in preparing for today's deposition, did you read Defendant's Amended Preliminary Proposed Claim Constructions dated February 20th, 2025?

A No, I believe I was provided with excerpts from each of those that I've included in my declaration. But other than that, I did not read them.

Q Okay. Is there anything -- now today, right now, I'm just talking about today's deposition, not the declaration. Was there anything else that you reviewed to prepare for today's deposition?

A I reviewed portions of the file history of some of the parent applications.

Q Okay. Would that be, U.S. patent number 9,936,116, which is referenced in your declaration in this matter?

A Yes. I also briefly reviewed the issued patents from some of the predecessors.

Q Okay. So other CEV patents that are related to the asserted patents here, the '761 patent and the '472 patent. You reviewed those

patents as well, you're saying?

A I looked at portions of those where the file history would have indicated to me that they should have had the same specification.

Q Okay. Is there anything else that you reviewed in preparing for today's deposition that we haven't discussed?

A Not that I can recall.

Q How much time did you spend preparing for today's deposition?

A After having prepared the declaration?

Q Yeah, just for today's deposition. Unrelated to the declaration preparation.

A I don't know exactly, but, ballpark eight to 12 hours.

Q Okay. Did you meet with Ms. Weiskopf?

A Over video link.

Q And how many times did you meet with Ms. Weiskopf?

A Twice.

Q And for how long were those meetings?

A The first one was about three hours, I believe. Second one, maybe ten minutes.

Q Did you meet with anyone else to prepare for today's deposition?

A No

Q So, I know you're here on behalf of T-Mobile. Is that correct?

A They have retained me. I'm here to give my own opinions, but at their request.

Q Okay. And so related to that, the opinions that you're giving are supposed to be honest and given on an informed basis to the court. Do you agree?

A I do.

Q Okay, I don't know if you're familiar with this rule, but there's a Rule 702 for experts that says the testimony is supposed to be based on sufficient facts or data. Do you agree that the testimony that you are to provide to the court should be based on sufficient facts or data?

A I do.

Q Okay. And do you understand that as a retained expert, your testimony should assist the court in understanding the evidence? Is that right?

A That's my understanding.

Q Okay. And do you agree that your testimony should not omit relevant facts that

could impact the court's analysis of the technical matters?

A Yes. As I understand that, I would not want to admit any facts that are relevant to the topic at issue.

Q And just to clarify, you meant to say you would not want to omit any facts, right?

A Yes, O-M-I-T.

Q Understood. So if there was evidence that was unhelpful to T-Mobile, you would still be obligated to address that evidence. Is that right?

MS. WEISKOPF: Objection. This is legal issues. If you've got something you want to show him, you should just show him.

MR. LESKO: Oh. So the question is, if there's certain evidence that was unhelpful for T-Mobile, would you still be obligated to address it, Mr. Wolfe?

MS. WEISKOPF: I renew my objection.

THE WITNESS: I don't know. Again, that's a complicated legal question. I think that the court would have to determine whether or not there was relevance, whether or not it was within the scope of my testimony. I think it's

more complicated than a yes or no answer, but I certainly am always trying to do my best to give full and complete answers to the, questions relevant to my testimony without regard to whether or not they're helpful for T-Mobile or CEV.

MR. LESKO: In forming your opinions in this case, you reviewed certain materials. Is that correct?

THE WITNESS: Yes

BY MR. LESKO

Q And you listed those materials in your declaration, is that correct?

A Yes. I've done my best to list them all as best as I can recall.

Q And so the materials you reviewed, you selected because you think they're relevant and important to your analysis. Is that correct?

A Well, not necessarily everything that I reviewed is relevant or important, but if I reviewed it and then determined that it wasn't relevant, I may have still disclosed it.

Q Okay. So during your review, you might have reviewed certain materials and then determined after reviewing them that either

they're not relevant or parts of them might not be relevant.

A That's certainly possible.

Q So if you look in the Box folder you provided, there's a Plaintiff's Exhibit 1. Can you pull that up or download it, whichever is easier for you?

(Whereupon, the above-referred to document was marked as Plaintiff's Exhibit No. 1 for identification.)

A Okay.

Q Okay. So Plaintiff's Exhibit 1, take a few minutes, a few seconds to look it over. And can you confirm that Exhibit 1 is your declaration that you submitted in this matter and that it bears your signature?

A Based on my cursory review, it appears to be.

Q Okay. And if you scroll down to PDF Page 203, which is, I think, Page 201 in the document, you should see your signature page. Let me know when you get there.

A I see it.

Q Okay. Is that your signature on the page there?

A Yes.

Q Okay. So your declaration says there on that page, under penalty of perjury, under the laws of the United States of America, to the best of my knowledge, the foregoing is true and correct. Do you see that?

A I see that.

Q Okay. And you're aware of the seriousness of that?

A I am.

Q And you believed that statement at the time of your declaration when you signed it?

A I did.

Q And you said you reviewed your declaration in preparing for today's deposition. Is that right?

A Yes.

Q And do you still believe that everything in your declaration is true and correct?

A As far as I'm aware.

Q And if you discovered something in your declaration that was untrue or incorrect during today's deposition, would you change your testimony?

MS. WEISKOPF: Object to form. This is

vague.

THE WITNESS: We'd have to look at it on a case by case basis. I would acknowledge if something is incorrect. I think the nature of the error would determine whether or not my testimony changes.

MR. LESKO: Sure. So if you saw an error in there that needed to be corrected, you would be able to correct it on the record today?

MS. WEISKOPF: Object to form, speculative.

THE WITNESS: Again, we'd have to see it. But if I'm able to correct it on the record, I would do so.

MR. LESKO: So just to confirm, the testimony you are providing today will also be true and correct to the best of your knowledge. Is that right?

THE WITNESS: Yes. I will do my very best to give true and correct testimony today.

BY MR. LESKO:

Q And did you write this declaration yourself? Exhibit 1?

A Not every word. I prepared the declaration, but I did not write every word.

Q Okay. Did you review it carefully before you signed it?

A I did.

Q And did any of T-Mobile's lawyers draft portions of this declaration for you?

MS. WEISKOPF: Objection under Rule 26. You can answer, but you can't reveal any privileged communications, Dr. Wolfe.

THE WITNESS: Yes.

MR. LESKO: Do you recall what portions were written by T-Mobile's lawyers?

THE WITNESS: Certainly the legal standards were provided by T-Mobile's lawyers. And then there were other portions and I don't recall exactly which ones that were the result of discussions I had with T-Mobile's lawyers, where I explained my opinions, and then in some cases, they recorded those opinions into a first draft.

BY MR. LESKO:

Q Okay. So in some instances, the first draft was handled by the lawyers and then reviewed by you?

A With certain language, that is true. Yes. But again, anything that involved my opinion originated from me.

Q What -- when you say certain language, do you have any -- can you point out which portions might have been drafted by the lawyers first, aside from the legal section, which you've already mentioned.

MS. WEISKOPF: I'm going to continue to object under Rule 26 and privileged communications. Dr. Wolfe, please don't reveal anything privileged.

THE WITNESS: I actually don't recall.

MR. LESKO: What percentage of the sections do you think were drafted by the lawyers first, roughly?

THE WITNESS: I haven't tried to estimate that, I don't know, I mean, in this particular declaration, 80 percent plus, I believe is just raw evidence and wasn't drafted by anybody at T-Mobile or anybody on the T-Mobile legal team or me. About 80 percent of it is just quoted evidence.

BY MR. LESKO:

Q So you're referring, for example, to pages -- just looking at your declaration, pages 15 through, let's say -- pages 15 through 165 show, I mean, I think you'll agree with me,

there's excerpts from the file histories. Is that what you're referring to as the quoted evidence, Page 15 through 165?

A That is the bulk of the quoted evidence.

Q Okay. So then pages, let's just focus on then pages, and I think we already talked about the introduction and some of the legal discussion. So let's just focus on pages 166 through, I don't know, I guess the end of the declaration, which is Page 201. So pages 166 to 201. Do you recall which sections there were drafted by the T-Mobile lawyers?

MS. WEISKOPF: And again, I'm going to object to privileged communications. Please don't reveal anything privileged, Dr. Wolfe.

THE WITNESS: So everything was based on the opinions that I developed and discussed with the attorneys. But I don't recall which text I drafted originally and which text was drafted by attorneys that I then reviewed and approved.

MR. LESKO: Okay. So percentage wise, one page - this very specific page range. I'm talking about pages 166 to 201. What percentage of that did you draft first?

MS. WEISKOPF: Objection. Asked and

answered.

THE WITNESS: No, I think I've already answered that I don't have that number.

MR. LESKO: So you have no idea which parts were drafted by you or the lawyers between pages 166 and 201?

MS. WEISKOPF: Objection. Asked and answered.

THE WITNESS: I don't believe -- I explained to you how it was prepared.

MR. LESKO: So in forming -- in drafting the declaration, was there any limits placed on what materials you could review to draft your declaration?

MS. WEISKOPF: Objection, please don't reveal anything privileged, Dr. Wolfe.

THE WITNESS: I'm not aware of any.

MR. LESKO: So, for example, if you -- did you ever request additional materials to review and then they weren't provided to you?

THE WITNESS: I'm sorry, did you ask, did I ever request materials that were not provided to me?

BY MR. LESKO:

Q Yeah. Did you ask, for example, did you

ask counsel, T-Mobile's lawyers to provide you with a document to review and they said, no?

A That did not happen. Every time I asked for a document to review, it was provided.

Q So when it came to what documents you reviewed, did you make that decision or did T-Mobile's lawyers guide you?

MS. WEISKOPF: You know, objection. This is really getting into privileged communications. Please don't reveal any communications between counsel, Dr. Wolfe.

THE WITNESS: I'm not quite sure how to answer that without revealing privilege. Certainly counsel informed me what the patents were that were in this case, right? I didn't come up with that on my own. But there were other situations where I asked to review additional documents.

MR. LESKO: So if you could in Exhibit 1, turn to the PDF, Page 7. There's a Paragraph 18. Let me know when we get there, Dr. Wolfe.

THE WITNESS: I see that.

BY MR. LESKO:

Q Okay, great. So in Paragraph 18, we don't have to read it out loud. Just read it to

yourself. There is a list of -- it's a bullet pointed list of five items. And it says you have reviewed the following materials in addition to any documents cited herein. And there's five items listed. Do you see that?

A Yes.

Q Is that list a complete and accurate record of everything you reviewed in preparing your declaration?

MS. WEISKOPF: Objection.

THE WITNESS: As best as I can recall, yes.

MR. LESKO: So you don't know of any other documents beyond those listed here that you reviewed in preparing your declaration?

THE WITNESS: I don't recall any. Clearly, if I cited any other documents in the declaration, I must have reviewed them and I could have missed them in making this list. But this is what I recall having reviewed.

MR. LESKO: Was there any materials that you intentionally avoided reviewing in preparing the declaration?

MS. WEISKOPF: Objection. This has been asked and answered.

THE WITNESS: No.

MR. LESKO: I'm sorry. Did you answer the question?

THE WITNESS: Yeah, I said no.

BY MR. LESKO:

Q Oh, okay. I didn't hear you. And in preparing your declaration, did you conduct any independent research for other materials that may have been relevant to your declaration?

A No.

Q Did you review any other litigation documents prior to preparing your declaration? Did you review any infringement contentions from CEV, for example?

MS. WEISKOPF: Objection, vague.

THE WITNESS: I have not reviewed any infringement contentions.

MR. LESKO: Okay. I'll represent to you, yes, CEV served on T-Mobile some infringement contentions in this matter. Did you review anything like that in preparing your declaration?

MS. WEISKOPF: Objection, vague.

THE WITNESS: No.

MR. LESKO: So I also represent to you

that T-Mobile served some invalidity contentions in this matter upon CEV. Did you review any invalidity contentions prior to preparing your declaration?

THE WITNESS: No, I did not review any invalidity contentions with respect to this matter.

BY MR. LESKO:

Q Okay. So, and now we're talking about not just for preparing your declaration. Just you have not seen any invalidity contentions relating to this matter ever. Is that your testimony?

A Correct.

Q Okay. So attached to the declaration, if you scroll down to PDF Page 205 is where it begins, that's your CV starting there on Page 205. Is that correct?

A Yes, as of mid-February.

Q And as shown in your CV, you've provided expert testimony in a number of cases. Is that correct?

A Yes.

Q Do you review any prior expert testimony in preparing this declaration, Exhibit 1?

A Oh, make sure I answer the question you asked. I reviewed some testimony from Dr. Hughes, and I reviewed some declarations that were in the file history, but I did not review any of my own prior expert testimony in preparing this declaration.

Q Okay. And you're right. That was my question. Did you review your own prior testimony regarding this expert declaration?

A I did not.

Q So now we're going to scroll up to Paragraph 24 of this exhibit. Paragraph 24, if you're there, it says my qualifications and experience made me, at least, a person of ordinary skill in the art. Can you see that?

A Yes.

Q Okay. Does that also mean you're qualified as an expert to provide testimony in this matter?

MS. WEISKOPF: Object to form, it's a legal issue.

THE WITNESS: I believe that I'm qualified to provide testimony on the issues that I am providing testimony on. There are going to be many other issues in this case where the

expertise required is different than mine.

MR. LESKO: Okay. So for purposes of claim construction, as of 2005, you were at least a person of ordinary skill in the art?

THE WITNESS: I believe so. Again, the court may, define the qualifications of a person of ordinary skill in the art at some point and at that point I would reevaluate. But under my understanding of what is required of a person of ordinary skill in the art, I am at least a person of ordinary skill in the art, and was, as of 2005.

BY MR. LESKO:

Q Okay. If you could scroll up again to Paragraph 18. Like I said, I asked you a few questions about the amount of time you spent revealing each of the materials listed here. If you could help me with that. So looking at U.S. patent number 10,063,761, in preparing your declaration, about how much time did you spend reviewing that?

A I don't recall.

Q I'm sorry, I couldn't hear your answer.

A I don't recall.

Q Okay. Did you take notes as you were

reviewing it?

A No.

Q Did anyone assist you in reviewing these documents, like do you have another expert or somebody at your group that helps you with reviewing documents like these?

A No.

Q But you received some guidance from counsel on what to review in these patents -- in this patent, I should say?

A I was told what claims are at issue in the case, but that's the only guidance I received.

Q Okay. So let's do this again, for patent number 11,153,472, do you know how much time you spent reviewing that patent in preparing your declaration?

A I don't.

Q And did anyone assist you with reviewing it?

A No.

Q Were you limited in the amount of time you could spend reviewing either the '761 patent or the '472 patent?

A No.

Q Okay. So let's go to the next item, the file history. So here in your declaration, Paragraph 18, you list three file histories that you reviewed in preparing your declaration. Do you agree with me?

A Yes.

Q Do you recall how much time you spent reviewing the file histories?

A I do not.

Q And did you take notes as you were reviewing those file histories?

A No.

Q And did anyone assist you in reviewing the file histories, someone else at your firm or another expert?

A No, I discussed them at certain points in time with counsel. But no one else.

Q Okay. And for the file histories, was there any portions of them that you skimmed, let me ask you this first. I'm sorry. Withdraw the question. For each of the file histories listed in Paragraph 18, did you read it from start to finish?

MS. WEISKOPF: Objection, vague.

THE WITNESS: I had the entire file

history available to me, but there were sections that I did not read carefully that involve things like whether or not fees were paid on time, and other things that simply weren't relevant to my opinions.

MR. LESKO: Okay. So at times did you skim the file histories? Is that accurate? You skimmed through them or skipped over parts that seemed irrelevant to you?

MS. WEISKOPF: Object to form. Asked and answered.

THE WITNESS: I only skimmed parts that I didn't think would constitute the intrinsic record, so I carefully read all the parts in which there were representations made by the applicant, and where there was feedback provided by the examiner. Those are the portions that were relevant to me, including amendments and summaries of interviews and things like that.

MR. LESKO: Did you run searches for terms as well when you looked at the file histories? Like a Ctrl-F to try to find certain words?

THE WITNESS: Not in preparing the declaration. I don't think I did.

BY MR. LESKO:

Q And let's circle back to the patents for a moment. So for those, U.S. patent numbers 10,063,761 and 11,153,472, did you read the entire patent from start to finish?

A Yes.

Q So some of the patents have references cited at the beginning of the patents. Did you pull up any of those references or just skip past that part?

MS. WEISKOPF: Objection, compound.

THE WITNESS: Are you referring to the elements listed in as a result of the prior art search?

MR. LESKO: Let's just pull up, if you could, Plaintiff's Exhibit 2. That'll make this simpler. In the Box folder. Let me know when you get there, Dr. Wolfe, please.

(Whereupon, the above-referred to document was marked as Plaintiff's Exhibit No. 2 for identification.)

THE WITNESS: Okay, I have that.

BY MR. LESKO:

Q Thank you. So if you look at the patent starting mostly on Page 2 through Page 4, there's

various references cited, I think those are references that were cited during prosecution. Did you skip over that part, or did you read all that?

A I read --

MS. WEISKOPF: Object to form, vague.

THE WITNESS: I read the text that is in the '761 patent. I did not pull up each and every one of those documents and review them. in some cases where the examiner referred to specific quotations in the file history, I did verify those.

MR. LESKO: So if there is a rejection, for example, in the file history that involved one of these prior art references, you would have actually pulled up the reference or just read what the examiner said about it?

THE WITNESS: In some cases I verified the quote, but I did not read the entire reference and determine whether or not the examiner had cited to the best portion, for example.

BY MR. LESKO:

Q Okay. So for the -- and maybe to save time, I won't pull up the '472 patent. But so

the '472 patent, would it be the same that the references cited section that we just referred to that starts on Page 2, would you have read the names of the documents but not the actual documents?

A Correct.

MS. WEISKOPF: Objection, mischaracterizes testimony.

THE WITNESS: I mean, there may have been cases where I've read the documents previously. I recall certain ones. I think, some of the touchscreen patents in particular, but, I did not go through each one of the what I believe is probably more than a hundred documents that were listed as references cited and review each one.

MR. LESKO: So, if you could, let's turn back to Plaintiff's Exhibit 1 and Paragraph 18 that we were reviewing.

So, the next item listed is the expert declaration of Dr. Hughes dated December 12th, 2022. Do you see that?

THE WITNESS: Yes.

BY MR. LESKO:

Q How much time did you spend reviewing

that document --

A I don't recall.

Q -- in preparing your declaration?

A I do not recall.

Q Did anyone assist you in reviewing that document?

A No.

Q And did you read that one from start to finish, the Dr. Hughes declaration?

A I believe I did at one point.

Q Was there any parts of it that you decided to skim instead of reading carefully?

A I only skimmed his CV.

Q The CV?

A Yeah.

Q So did you feel like you spent sufficient time reviewing the Dr. Hughes declaration to understand it?

MS. WEISKOPF: Object to form.

THE WITNESS: I spent sufficient time to understand it for purposes of the opinion that I put in my declaration.

MR. LESKO: And was there any parts of it that you were told to ignore or not review?

THE WITNESS: No.

BY MR. LESKO:

Q The last two documents here are Plaintiff's Proposed Constructions, dated January 3rd, 2025, and Defendant's Amended Preliminary Proposed Claim Constructions, dated February 20th, 2025. Do you see that in Paragraph 18 of Plaintiff's Exhibit 1?

A Yes.

Q And did you read those from start to finish? Did you read those entire documents and review them?

A No.

Q What parts did you not read?

A I only looked at the parts that were relevant to the term that I opined on.

Q Okay. So where there was -- the disputed claim terms listed, aside from the controller and the means-plus-function debate, you ignored those claim terms like the device and the periods in the preamble discussion?

MS. WEISKOPF: Object to form, mischaracterizes testimony.

THE WITNESS: I did not carefully review portions that were not related to the claim terms that I've opined on.

MR. LESKO: And how many claim terms did you opine on?

THE WITNESS: Well, there's some semantics involved. Maybe I'd characterize it as three. They're very similar, but they're separately written out in different claims.

BY MR. LESKO:

Q Let's make it a little easier. So if we look at Plaintiff's Exhibit 1, starting on Page 168 --

(Simultaneous speaking.)

Q -- PDF Page 171, there's a list of three disputed claim terms. Do you see that?

A Yes.

Q Table, I should say. It's in a table format, right?

A Yes.

Q Okay. So in the claim construction documents from CEV and from T-Mobile that you reviewed, did you focus solely on those three terms?

THE WITNESS: Yes.

MS. WEISKOPF: Object to form, mischaracterizes testimony.

THE WITNESS: I did.

MR. LESKO: We'll scroll back up to Paragraph 18 of your declaration and move on. Are you confident your review of the materials in Paragraph 18 was careful and thorough?

THE WITNESS: Yes, for the purposes that I reviewed them, which was for preparation of this declaration.

MR. LESKO: So you believe you met your obligation as an expert to consider all relevant information that was in these documents?

MS. WEISKOPF: Object to form.

THE WITNESS: Yes.

MR. LESKO: So you didn't feel like your review of this case was rushed or you were told to ignore certain evidence or anything like that? You felt like you had a full consideration of the evidence listed in Paragraph 18? Is that correct?

MS. WEISKOPF: Object to form, asked and answered.

THE WITNESS: I felt that I -- I felt that I was given the freedom, and also that I actually performed a complete review of the relevant materials.

MR. LESKO: Dr. Wolfe, if you could

please download or open the Plaintiff's Exhibit 4. It's been marked in the deposition folder. And let me know when you have that in front of you.

(Whereupon, the above-referred to document was marked as Plaintiff's Exhibit No. 4 for identification.)

THE WITNESS: I do have it.

BY MR. LESKO:

Q If you could skim through this document. And do you know what this document is?

A My understanding is that this was testimony that was provided by Dr. Hughes in another case relating to the same two patents.

Q Okay. So if you look at -- you don't have to go back to your declaration. Is this the -- does this look like the expert declaration of Dr. Hughes dated December 12th, 2022, that's listed in Paragraph 18 of Plaintiff's Exhibit 1?

A It appears to be. It has the same docket number.

Q Okay. And so according to Paragraph 18 of Plaintiff's Exhibit 1, your declaration, you reviewed this document of Dr. Hughes. Is that correct?

A I did.

Q If you turn to Paragraph 12 of Plaintiff's Exhibit 4. Are you there?

A Yes.

Q Did you see the list of materials in Paragraph 12? There's Materials A through T in Paragraph 12. It's a list. Do you see that?

A Yes.

Q So you read Paragraph 12 of Dr. Hughes's declaration before finalizing the declaration. Is that correct?

A Yes.

Q Now, looking at Paragraph 12, if you can tell me by letter indication which of these documents A through T did you review while you were drafting your declaration that you submitted in this matter?

A I don't want to go through some matching exercise here. I've already told you and disclosed the documents that I reviewed.

Q Okay, so I'll help you. So, A and B are the patents, and you reviewed those. So, here in Exhibit 4, there's 12a and 12b. You viewed both of those. Is that right?

A As I said, I've already told you in

writing and in answering your questions exactly what documents I reviewed.

Q Okay. 12c is a portion of the prosecution history and you said you review that prosecution history. Is that correct?

A I did review portions of the prosecution history of the 9,936,116 patent.

Q Okay. 12d and 12e, those are also -- yeah, you already said 12d. You said you reviewed the '761 patent file history, right?

A I did. Again, I haven't seen those particular Bates numbers, but I have reviewed the prosecution history of the '761 patent.

Q And 12e, your reviewed the prosecution history of the '472 patent. Correct?

A Correct.

Q So, 12f is Defendant's Updated List of Proposed Terms for Construction, and there we're talking about the Defendant's TCL. Did you review that document in preparing your declaration?

A No.

Q Let's say 12g and h are other claim construction documents from the CEV versus TCL litigation. Did you review either of those in

preparing your declaration, Plaintiff's Exhibit 1, in this case?

A No. As I said, I told you exactly multiple times what I reviewed in preparing my declaration.

Q Can you answer the question?

A I did answer the question.

MR. LESKO: Reporter, can you read back the question to Dr. Wolfe?

COURT REPORTER: Give me a moment.

(Whereupon, the record was read back.)

MS. WEISKOPF: I'm going to object to relevance.

MR. LESKO: Can you answer the question, Dr. Wolfe?

THE WITNESS: I will repeat my answer. No. I have already provided you, both in writing and in response to your prior questions, a list of exactly what I reviewed in this case.

MR. LESKO: Okay. Let's say, Paragraph 12i, declaration of Dr. Ryan Garlick, did you review that in preparing your testimony in this case?

MS. WEISKOPF: Objection, relevance.

THE WITNESS: I believe I've answered

that already. I did not.

MR. LESKO: 12j, the deposition transcript of Dr. Ryan Garlick taken on December 2nd, 2022, did you review that in preparing your declaration?

MS. WEISKOPF: Objection, relevance.

THE WITNESS: As I've told you now many times, that is not one of the things that I relied on or reviewed in preparing my declaration.

MR. LESKO: Okay. So 12k through 12t in this Plaintiff's Exhibit 4, did you review or rely on any of those documents for preparing a declaration?

MS. WEISKOPF: Objection, relevance.

THE WITNESS: As I testified several times now, those are not documents on the list of what I reviewed or relied on for preparing my declaration.

MR. LESKO: Do you see here that Dr. Hughes states, the data or other information that I considered in forming the opinions that I may express in this phase of the action include those detailed in the listing that follows. You see that in Paragraph 12 of this Plaintiff's Exhibit

4, correct?

THE WITNESS: Yes.

BY MR. LESKO:

Q So you reviewed Dr. Hughes's declaration. So everything in Paragraph 12, you are aware that it existed at the time you prepared your declaration? Is that right?

A I'm aware that it existed, yes.

Q Did anyone tell you to not review these materials?

A No.

Q So you chose not to review the materials, aside from those that you said you reviewed in Paragraph 12?

MS. WEISKOPF: Object to form. Relevance.

THE WITNESS: I reviewed the materials that I believed at the time were relevant and necessary to form the opinions that I provided in my declaration. And I have provided you with a list of those materials, and I have testified as to what materials I reviewed. Those are the materials that I chose to review.

MR. LESKO: Okay. So, 12f through 12t, you were aware of them and you chose not to

review?

(Simultaneous speaking.)

MS. WEISKOPF: Objection. Asked and answered.

THE WITNESS: Yes, I was aware of thousands of documents that I did not review for purposes of this declaration.

MR. LESKO: So you didn't mention these materials in your declaration, either, did you? 12f through 12g in Plaintiff's Exhibit 4?

MS. WEISKOPF: Object to form. It's vague and irrelevant.

THE WITNESS: My declaration stands on its own. But I don't recall mentioning the documents that are listed in Paragraph 12 Subsections f through p in my declaration.

MR. LESKO: So you didn't explain in your declaration how these might have been relevant to your opinion or not relevant to your opinion?

MS. WEISKOPF: Object to form.

THE WITNESS: I've already told you I don't recall mentioning them in my declaration at all. I certainly did not explain in my declaration every document that was not relevant

to my opinion.

MR. LESKO: So, we've been going an hour here. Do you want to take a break or do you want to keep going, Dr. Wolfe? I'm fine either way.

THE WITNESS: I'm fine either way, as well.

MR. LESKO: All right. We can just keep going. No problem. Figured I would offer.

BY MR. LESKO:

Q So let's say in Plaintiff's Exhibit 4, if you could. We will turn to Paragraph 67, which is on Page 25. Let me know when you get there.

A Okay.

Q Are you there, Dr. Wolfe?

A I am.

Q Okay, thanks. So there's a heading there, The Device. Do you see that?

A Yes.

Q Okay. So in Plaintiff's Exhibit 4, Paragraph 67 through 83, are under the heading The Device. Do you agree?

A Yes.

Q So, in preparing your declaration, did you review these Paragraphs 67 through 83 from

Plaintiff's Exhibit 4?

A I read them. I didn't rely on them because I haven't provided an opinion on the phrase the device in my declaration.

Q So you're aware of these paragraphs in Plaintiff's Exhibit 4 and you did read them?

A Yes.

Q I think you just said you didn't comment on them in your declaration at all. Is that correct? The declaration you submitted in this matter?

A Correct. That is not one of the topics I was asked to provide opinions on.

Q So were you told to ignore them or you chose to ignore these Paragraphs 67 through 83?

MS. WEISKOPF: Objection, mischaracterizes evidence -- testimony, I mean.

THE WITNESS: Neither. They simply were not on a topic that I was asked to provide testimony or opinions on.

MR. LESKO: That claim language, the device, is that part of the claim term that you opined on? Does it appear in the claim term that you opined on, those words, the device?

MS. WEISKOPF: Objection, vague.

THE WITNESS: They do.

MR. LESKO: So is it possible a discussion of the device could be relevant to your discussion of the claim terms in the declaration?

MS. WEISKOPF: Object to form. Vague.

THE WITNESS: I don't know what you mean by it's possible. It's certainly possible that it could be relevant to some discussions of those claim terms, but it's not important to the opinions that I provided. The opinions that I provided are accurate whether or not the phrase the device is indefinite.

BY MR. LESKO:

Q Okay, let's go back to Plaintiff's Exhibit 4, and starting on PDF Page 30, Paragraphs 84 through to 116, let's say. If you could just skim through that and tell me, did you read those paragraphs while you were reviewing Dr. Hughes's declaration in preparing your declaration in this manner?

A I did.

Q So you were clearly aware of them because you read them, right?

A Yes.

Q Were you instructed to ignore them?

A No. As we've -- I've testified several times, I was not instructed to ignore anything.

Q Okay. So you decided to ignore -- I'm sorry. I've got to look at the paragraphs here. Let me start again. Withdraw the question.

You decided not to comment in your declaration on Paragraphs 84 through 116 of Plaintiff's Exhibit 4. Is that correct?

MS. WEISKOPF: Objection, mischaracterizes testimony.

THE WITNESS: I don't recall whether or not I commented on any of those paragraphs. I would have to go back through my declaration again. My declaration is what it is. But I don't recall relying, in any substantial way, on that particular set of paragraphs, because those paragraphs don't specifically address the topic of my opinions.

MR. LESKO: Well, if there was an item in Paragraphs 84 through -- let me start again. I withdraw the question.

If there was an item or an opinion by Dr. Hughes in Paragraphs 84 through 116 that you disagreed with, would you have commented on that

in your declaration that you submitted in this matter?

MS. WEISKOPF: Object to form, mischaracterizes testimony.

THE WITNESS: Not necessarily. I was asked to provide opinions in this declaration on a specific set of topics. Whether or not I disagree with other statements made by Dr. Hughes, I was not doing a comprehensive critique of all of Dr. Hughes's opinions in my declaration. I was providing my opinions on specific claim construction issues, and where it would be helpful for the court for me to contrast those with statements made by Dr. Hughes with respect to that specific set of issues, I included those.

MR. LESKO: Okay, but you certainly had Paragraphs 84 through 116 in front of you, so you had the opportunity to comment on them if you felt it was necessary. Is that right?

MS. WEISKOPF: Objection to form, mischaracterizes testimony.

THE WITNESS: I was asked to address a specific set of issues in my report. I focused my report on addressing that set of issues. I

did not address issues outside of what I was asked to do, whether or not that was possible or not.

MR. LESKO: If you look on PDF Page 30 of Plaintiff's Exhibit 4. It says cellular network access fees. Does that term, cellular network access fees, appear in the claim language of elements (f)(i) and (f)(ii) of Claim 1 of the '761 patent or Claims 1 and 5 of the '472 patent?

THE WITNESS: Those words appear as part of longer phrases. So, the actual phrase in the '761 patent is potential cellular network access fees. Let me pull up '472 to make sure I get that phrase right.

The phrase in the '472 is potentially increased cellular network access fees. And then that's further qualified in the claim.

MR. LESKO: Okay. So you agree that these terms that are discussed in Paragraphs 84 through 116 of Plaintiff's Exhibit 4, they are a part of the terms that you address in your declaration in this matter?

MS. WEISKOPF: Object to form, mischaracterizes testimony, asked and answered.

THE WITNESS: Those words do appear in

the functions of the two -- the three claimed controller terms that I opined on, as parts of longer phrases.

MR. LESKO: But you felt it was unnecessary to carefully review or opine on Paragraphs 84 through 116 that address those phrases in Dr. Hughes's declaration, Plaintiff's Exhibit 4?

MS. WEISKOPF: Object to form, mischaracterizes his testimony.

THE WITNESS: I did review them. I didn't think I needed to provide any additional testimony, other than what's in my declaration, in order to express the opinions that are in the declaration.

MR. LESKO: So if there was something in Paragraphs 84 through 116 that you felt you needed to comment on or clarify, you would have provided that opinion in your declaration in this matter?

MS. WEISKOPF: Object to form, vague, mischaracterizes testimony.

THE WITNESS: Again, I don't understand when and how and for what purpose -- I was able to express and explain the opinions that are

included in my declaration by using the references to Dr. Hughes's declaration that are present there. And I do not feel, and did not feel, that I need to comment on any other portions of Dr. Hughes's declaration in order to express those opinions.

BY MR. LESKO:

Q Is there any explanation in your declaration of how Paragraphs 84 through 116 of Plaintiff's Exhibit 4 influenced your opinions in your declaration?

A I don't recall. Would you like me to go through the declaration and look?

Q Another way to say it is this: if it's not in there, if you don't refer to 84 through 116 at all, did it have any impact on the opinion that you offered in your declaration?

MS. WEISKOPF: Object to form. Vague.

THE WITNESS: And as I testified before, I cited to every portion of Dr. Hughes's declaration that was necessary for me to express the opinions that are in my declaration. I read additional portions, but I did not find commenting on them to be necessary in order to express the opinions that are in my declaration.

BY MR. LESKO:

Q I think earlier when we were discussing your declaration you referred to the fact that you were aware of prior proceedings involving these same patents. Does that -- let me ask you a different way. Are you aware that these patents were involved in prior litigation, ones that you comment on in your declaration, Plaintiff's Exhibit 1?

A It is my understanding that Plaintiff's Exhibit 4 is a document from a prior litigation. And so that means that it is my understanding that the two patents at issue here were at issue in a prior litigation.

Q And when did you become aware of that fact?

A When I saw Plaintiff's Exhibit 4.

Q So you were provided this declaration and that made you aware of the prior litigation proceedings? Is that a fair characterization? Plaintiff's Exhibit 4 was given to you, and then you became aware that the patents were involved in litigation?

A Yes.

Q Do you know that there was a Markman

proceeding in that prior CEV v. TCL case that's captioned here in Plaintiff's Exhibit 4?

A I don't know one way or another whether or not there was a hearing.

Q Did you ask if there was a hearing? Did you ask counsel, for example, if there was a hearing involving these patents?

A No.

Q Plaintiff's Exhibit 4, if you look at Paragraph 12h, it refers to Defendant's Opening Claim Construction Brief. Did you read -- I think earlier you said you did not review Defendant's Opening Claim Construction Brief, item 12h on this list. Is that correct?

A That's correct.

Q Did you ask for item 12h?

A No. TCL's positions in a related case were not relevant to the opinions that I presented.

Q And what about opinions of TCL's expert in a related case? Would those be relevant?

A No. I formed my opinions independently. I did not base them on Dr. Garlick. I assume that's who you're referring to. I did not base any of my opinions on Dr. Garlick's opinions.

Q So you never even have seen Dr. Garlick's opinion, is that correct?

A I believe Dr. Hughes may have cited one or two of them, or repeated one or two of them, but that would be the only way I would have seen it.

Q So any testimony of Dr. Garlick that you've seen would have been only what's cited in Plaintiff's Exhibit 4, Dr. Hughes's declaration, is that correct?

A That's my recollection.

Q And so, just to keep this simple, it sounds like you did not review any claim construction briefing, oral arguments, or other litigation documents that were part of the CEV v. TCL proceeding, as captioned here on Plaintiff's Exhibit 4. Is that right?

A I'm not sure I understand the question. As we've discussed, I have reviewed Dr. Hughes's declaration.

Q Yeah, maybe that's an easier way to phrase the question. And I apologize, it was a vague question. Let's try again.

Plaintiff's Exhibit 4 is the Dr. Hughes declaration from Cutting Edge Vision v. TCL.

And aside from that document, did you review any other documents from Cutting Edge Vision v. TCL in preparing your declaration in this matter?

A Not that I can recall. But, as I said, I've disclosed, either through citations or through listing, all the documents that I relied on in preparing my declaration.

MR. LESKO: Would we be able to take a short break here? Is that okay with everybody?

MS. WEISKOPF: Yeah. How long would you like, Justin?

MR. LESKO: Just five minutes. Just to use the bathroom.

MS. WEISKOPF: Okay. Thank you.

MR. LESKO: Thanks, everyone.

COURT REPORTER: Sounds good. We're off the record.

(Whereupon, the above-entitled matter went off the record at 10:24 a.m. and resumed at 10:31 a.m.)

COURT REPORTER: We are back on the record at 10:31 a.m. Pacific.

BY MR. LESKO:

Q So, just a bit of housekeeping here, Dr. Wolfe. Can you look at Plaintiff's Exhibit 3 in

the Box folder, please?

A Okay.

Q Do you recognize that document?

A Yes.

Q So is that U.S. Patent number 11,153,472 that we've been discussing and that you discussed in your declaration?

(Whereupon, the above-referred to document was marked as Plaintiff's Exhibit No. 3 for identification.)

A It appears to be.

Q Okay. So, Dr. Wolfe, if you could please pull up Plaintiff's Exhibit 5. Have you ever seen this document before, Plaintiff's Exhibit 5?

(Whereupon, the above-referred to document was marked as Plaintiff's Exhibit No. 5 for identification.)

A I don't recall having seen this before.

Q Okay. So this Plaintiff's Exhibit 5, you've never seen. It wasn't considered as part of the materials reviewed to prepare your declaration?

A It was not. As we've discussed a number of times, I've already told you what materials I

considered.

Q Okay. So, Dr. Wolfe, are you familiar with the term microprocessor?

A Yes.

Q What is a microprocessor?

A I think it depends on the context and the timeframe.

Q So, let's say as of 2005, October of 2005, how would you describe a microprocessor?

A Again, I think it would depend on the context, but it would be common at that time to use that phrase to describe the primary computing component of a general purpose computer that would perform different computing tasks based on how it was programmed.

Q So the phrase, the word microprocessor, does that typically refer to a physical item?

A Again, it depends on the context, but typically it would be a physical item.

Q So were you ever aware of someone using the term microprocessor to refer to something that wasn't physical?

A Yes.

Q And how would that happen?

A During the design and development phases

microprocessors are modeled. They're simulated. They are virtualized. They are emulated. So there are exceptions, depending on context, to using that term necessarily for a physical object. But certainly it was most common to use that term to refer to a physical object.

Q Would you say that's usually a structural object, too, the microprocessor? Like, an object that has structure?

MS. WEISKOPF: Objection, vague.

THE WITNESS: I think that's a legal term. A person of ordinary skill in the art typically would not talk about whether or not a microprocessor had structure.

MR. LESKO: But you discuss structure in your declaration, right?

THE WITNESS: Yes. I'm applying the legal standard as it was explained to me by counsel.

BY MR. LESKO:

Q Okay. When you refer to structure in your declaration, you're referring to structure in a legal sense. Is that your testimony?

A Yes. Yes. I mean, as I said, that's not a term that an engineer would normally use in

dealing with a microprocessor or any other electronic system. But it does have a specific legal meaning, as it's been explained to me, and that's what I've applied in my opinions.

Q Is a microprocessor part of an electronic system?

A It could be, along with other parts. I mean, a microprocessor alone doesn't, typically, do anything.

Q Is there a difference between a microprocessor and a microcontroller?

A Again, it depends on context and timeframe.

Q Let's say we're talking 2005 October. What's the difference between a microprocessor and a microcontroller?

A Again, it would depend on context. But oftentimes, in that timeframe, a microprocessor referred to what we would typically call a CPU, a single compute engine; where most commonly, in that timeframe, a microcontroller also included some input/output functionality and some memory integrated onto the same chip.

Q So, at that timeframe, a microcontroller has more elements integrated into it than a

microprocessor?

A Again, depends on context, but in what I think is probably the most common usage at the time, that would be true.

Q What are, like, the basic elements of a microprocessor in that timeframe, October of 2005?

A Again, it would depend on context and there would be a lot of variability. There are many different kinds of microprocessors in that timeframe, but, might include a program counter and arithmetic logic unit, a status register. But, again, a lot of variation. There are a lot of different approaches that could be used. There's no single answer to that question.

Q So the word micro in the term microprocessor or microcontroller, what is that referring to? Why does it say micro?

A Again, that depends on timeframe and context. But, initially, it was introduced in the 1980s as a way to differentiate computers that might be the size of a refrigerator from computers where the primary computing elements were on a single piece of silicon.

Q So the word micro, just to clarify, is

that usually the physical size of the item, the microcontroller or the microprocessor? Are you talking about physically how large it is?

A Again, it depends on context and timeframe, but, in many cases, it would refer to the physical size. By 2005, it had become almost irrelevant because other kinds of processors were, predominantly, obsolete.

Q So microprocessors and microcontrollers, as of 2005, sort of dominated the market for a CPU or a computing device?

MS. WEISKOPF: Object to form, vague.

THE WITNESS: In general, although there were hundreds of different kinds of microprocessors and microcontrollers at the time, and they often had quite different characteristics.

BY MR. LESKO:

Q Would you say that a microprocessor refers to a class of electronics devices?

A It depends what you mean by a class of electronic devices. I mean, you can build a class out of anything, abstractly. Microprocessors were used for many, many different things in the 2005 timeframe, and they

weren't necessarily interchangeable or suitable for other things.

Some microprocessors would be suitable for supercomputing, others would be suitable for a smoke detector. They would differ in key characteristics by factors of tens of thousands. They would not be suitable replacements for each other. They wouldn't necessarily contain the same components. They wouldn't contain the same components. They wouldn't -- the components that they did have in common wouldn't be connected together in the same way, and wouldn't be quantitatively similar.

So, if you make a class big enough -- objects as a class, physical objects, right, is a class. But it really just depends on how big you make the grouping as to whether or not it would be reasonable to make microprocessors into a class.

Q Well, is there a commonality -- if you use the term microprocessor, let's say, in October 2005, would a skilled artisan -- would that signal a specific type of item to a skilled artisan?

A I would say, no, not a specific type.

Because if you told me to go get a microprocessor and didn't give me a great deal more detail, I would not be able to go get one that was suitable for your needs.

Q So if I had some detail about the operations that the microprocessor was to perform, could you find a suitable microprocessor? Could a skilled artisan find one in October of 2005?

MS. WEISKOPF: Object to form.

THE WITNESS: If you had sufficient detail, then they probably could, but that could be quite a bit of detail depending on the context.

MR. LESKO: Okay. But usually, if I said these are the operations I need and I need a microprocessor for it, somebody skilled in the art in October of 2005 would understand what they're looking for, at least. Is that a fair statement?

MS. WEISKOPF: Object to form, vague.

THE WITNESS: No, it would depend on whether or not you had provided sufficient detail. If you told me that you needed a microprocessor that could calculate and

communicate, that would be not enough for me to figure out what you were looking for. If you told me a great deal more detail, then it might be.

MR. LESKO: Another way to phrase it is what -- would I know -- would a skilled artisan in 2005, October 2005 at least know the group of items to pull from if I said give me a microprocessor to perform these operations? So would they be looking at, for example, memories?

THE WITNESS: They might be looking at things that included memories. I mean, yes, there would be some boundary, but that boundary would be huge, and it would include a wide variety of things that are not substitutable for each other and that are not equivalent to each other. If you draw a big enough box, it can incorporate everything. If you draw a slightly smaller box, it can incorporate almost everything.

But you need to really be relatively specific in describing what the expectations are of a microprocessor, and how it's to be used in some reasonable detail in order for a person of ordinary skill to understand what you're talking

about. I mean, clearly if you just told me you need electronics, that would include some things and not other things, but it wouldn't give me enough guidance to be able to bring you electronics in a box that were suitable for your needs.

BY MR. LESKO:

Q But in reviewing your CV, just going to change topics here. You're a named inventor on a number of U.S. patents and patents abroad, is that correct?

A Yes.

Q Approximately how many patents have you been a named inventor on?

A I believe 90-some.

Q Okay. And in the course of your involvement in -- let me withdraw that question, sorry. So are you aware of something called the duty of disclosure, candor, and good faith at the U.S. Patent Office?

A I am aware of it. I am not a patent attorney or a patent examiner or a -- but it has been explained to me in my role as an inventor.

Q Okay. And what's your understanding of what that means?

A It's been some time. I haven't filed a patent in many years, but, in general, my understanding is that you are expected to disclose your invention in sufficient detail that a person -- that enables a person of ordinary skill in the art to practice the invention, that you must provide sufficient detail to show that you were in possession of the invention at the time of filing. And you need to disclose any relevant prior art that you're aware of.

Q Okay, and that applies to inventors. Is that right?

A That's the way I form my understanding. Yes.

Q Okay. So I'm reading from the USPTO rules. It says each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the office, which includes the duty to disclose to the office all information known to that individual to be material to patentability as defined in this section. So does that generally reflects your understanding of your duty as an inventor to the USPTO?

A Generally, it does. Again, I'm not

going to give you a legal opinion on it, but that's my general understanding.

Q All right. So and I understand you're not a lawyer giving legal opinions but part of that you would agree is if you're an inventor involved in a filing with the Patent Office, you should be honest with the Patent Office, right?

A Yes. In fact, more than that, honest and complete.

Q And I know you said this was a long time ago, but for writing your patent applications, was it your practice to write any portions of the specifications in the patent applications that you submitted?

MS. WEISKOPF: Object to form. This is getting pretty far afield.

THE WITNESS: I also want to be careful that I don't -- I don't own any of these patents. I wasn't paying the attorneys. I want to be careful that I don't go past privilege here. I produced inventions in a number of contexts. I don't believe I was ever the assignee. I would write an invention disclosure. I would provide that to a patent attorney or a patent agent. Depending on the circumstances, that patent

attorney or patent agent may copy portions from my invention disclosure verbatim into the patent application, or they may paraphrase it in other ways.

I would also often have verbal discussions with patent prosecutors to expound on or explain portions of my invention disclosure. Those would sometimes be turned into text by the patent prosecutor. And then I would always read and approve a patent application prior to its filing to ensure that it accurately reflected what I had invented, and that it did not have any misrepresentations, and that, as far as I could tell at the time, the explanations were sufficient.

MR. LESKO: So if you noticed any errors in the patents that you were an inventor on, you would correct them or ask the prosecuting attorney to correct those errors?

THE WITNESS: Prior to filing. I, in general have not had any interaction post-filing with any of my patent applications.

BY MR. LESKO:

Q All right, thanks for the clarification. And that's what I meant. So in preparing the

applications before you file them, it sounded like you would review them. And if you noticed errors or omissions, you would raise that with the prosecuting attorney.

A Yes.

Q I'm looking at -- I'm gonna put in the folder Plaintiff's Exhibit 6.

(Whereupon, the above-referred to document was marked as Plaintiff's Exhibit No. 6 for identification.)

A Okay.

Q Hang on one second here. I'm sorry, I think I marked the wrong exhibit here. I'm going to mark a Plaintiff's Exhibit 7 here and put in the Box. You can close Plaintiff's Exhibit 6. My apologies. Okay, so Plaintiff's Exhibit 7 should now be there. If you could open it, please.

(Whereupon, the above-referred to document was marked as Plaintiff's Exhibit No. 7 for identification.)

A Yes.

Q Okay. You see on the front there, your name is on Page 1 as an inventor. It says inventors Andrew L. Wolfe, do you see that?

A Yes.

Q Okay. So is this one of your patents, Plaintiff's Exhibit 7?

A It's one where I'm listed as a named inventor.

Q Okay. Could you scroll to Page 4 of Plaintiff's Exhibit 7?

A Okay.

Q So there's a Figure 2 there on Page 4 of this document. Do you see it?

A Yes.

Q Okay. So if you look at Item 206 in Figure 2, it says memory. Do you see that?

A Yes.

Q Based on your understanding of that term, is that memory a physical item?

A I don't think I've read this patent in almost 20 years. I'm not going to start giving you definitions based on one box in a picture.

Q Are you aware of a situation where a memory is something that isn't, you know, a physical location somewhere or physical storage?

A Depends on context. At some level, memory is always physical storage, but when we refer to it, it could be a virtual memory, it

could be an emulated memory. It needs to be considered in context before you can determine what the particular words are referring to.

Q Well, what about input switches? See item number 203. Would that be physical input switches or is that -- can that mean something else?

A Again, I haven't read this patent in almost 20 years. I -- it would depend on what the description is in the text. I would certainly think that it could be a physical input switch.

Q What other type of input switch is there?

A You can have software switches. But again, I don't recall what was described in this particular patent.

Q If you look at Item 224 there's a speaker. Item 222 there's a monitor. Item 220 there's a TV. Do those appear to be physical items just based on what they say, TV, monitor, speaker?

A Just based on Figure 2 alone, they do appear to be physical objects.

Q You've got Item 208 in the center.

That's the controller. You see that?

A It is a controller. Yes.

Q Now I notice all of the items in this figure are in boxes. Do you know why?

A I do not.

Q Does this look like a block diagram to you?

A It generally looks like one.

Q In a block diagram, are the items typically placed in boxes?

A That would be typical.

Q Would that be a common format in patents, sometimes you put the items in boxes in a block diagram?

MS. WEISKOPF: Object to form, vague.

THE WITNESS: That's not unusual. In a well-written patent, there would be additional text to describe what each box represents.

MR. LESKO: But sometimes, even if there's text describing what each box represents, sometimes there's high level block diagrams in a patent in your experience, is that right?

THE WITNESS: Sometimes patents include high level block diagrams.

MR. LESKO: And so even if there's a

structure or even if there's a physical item in the block diagram, it's not always described in the diagram itself. Is that right?

MS. WEISKOPF: Object to form.

THE WITNESS: I'm certainly aware of patents where there's a physical item in a block diagram, and the physical item is not described in the diagram itself.

MR. LESKO: If you look at -- if you could scroll down please, Dr. Wolfe, to Column 15 of this patent, Lines -- Line 36.

THE WITNESS: Okay.

BY MR. LESKO:

Q Can you read the sentence that begins at Line 36?

A In addition, use of the term means in any claim is intended to invoke 35 U.S.C. Section 112, Paragraph 6, and any claim without the word means is not so intended.

Q What's your understanding of that statement? What does it mean?

MS. WEISKOPF: Object to form; it's a legal issue.

THE WITNESS: I didn't write that; attorney did many years after I had provided my

invention disclosure, and it's also my understanding that the law has changed over time with respect to 35 U.S.C. 112, Paragraph 6. So, as an inventor on this patent, I don't have any understanding of whether or not that phrase is operable or -- and to me, it means exactly what it says.

MR. LESKO: You received some instruction on the law about intrinsic evidence in preparing your declaration. Is that right?

THE WITNESS: Yes.

MR. LESKO: Okay, so would you agree that this sentence at 15, 36 through 38 that you just read to me, is that part of the intrinsic record for this patent, Exhibit -- Plaintiff's Exhibit 7?

MS. WEISKOPF: Object to form.

THE WITNESS: I don't know; that's really a legal issue. I don't know whether or not legal statements made in patents are part of the intrinsic record or not.

MR. LESKO: Is the specification part of the intrinsic record of a patent?

THE WITNESS: It generally is, yes.

BY MR. LESKO:

Q Is this statement included in the specification of this patent, Plaintiff's Exhibit 7?

A Again, I can't give you a legal opinion, but it appears to be on its face. Yes.

Q So on its face, is this statement part of the intrinsic record?

A Again, it appears to be, but I can't give you a legal opinion. I mean, in general, I don't think you're allowed to redefine the law in the specification. So to the extent that it expresses the patentee's intent at the time, I suppose it is.

Q Well if I were asking you to review this patent and construe these claims or decide whether they're, you know, means plus function, would you -- would that sentence seem relevant to you or not?

A Again, I'm only implying the law as I've been instructed, but my understanding is that under the current standards for 112 6, intent is not a factor that I would consider.

Q So because it, in your view, expresses intent, you would just ignore it?

MS. WEISKOPF: Object to form,

mischaracterizes testimony.

THE WITNESS: It's not one of the factors that under the explanation that I've been given as to the current law with respect to means plus function elements, intent is not one of the factors that would be considered.

MR. LESKO: All right. I'm marking some other exhibits here. Just give me one second. Okay. If you could, I just uploaded Plaintiff's Exhibit 8. Could you please open that, Dr. Wolfe? And once you have it open, can you sort of skim through it and tell me, do you recognize this document?

(Whereupon, the above-referred to document was marked as Plaintiff's Exhibit No. 8 for identification.)

THE WITNESS: I looked at it. There were a lot of very similar documents in the file history, so I don't recognize whether or not this is a particular one or not.

BY MR. LESKO:

Q Okay. Let's separately open Plaintiff's Exhibit 1, and we'll go to Page -- PDF Page 16.

A Okay.

Q So Paragraph 46 says the application

leading to the '761 patent was filed on November 24th, 2015. On the same day, the claims were amended as follows. And then there are some claims provided. It looks like it was pulled from the history. And then there's a Paragraph 47 that has another excerpt from the remarks underneath it. And then that sort of ends on PDF Page 36. Do you see all that?

A Yes.

Q Okay, so now let's go back to Plaintiff's Exhibit 8. There's some amendments to the claims on Page 4 through 9. There's some -- and then on Pages 12 through 25, there's some remarks. And maybe another way -- easier way to do this, there's a -- also a date on Page 11 that says November 24th, 2015. So looking at all that, does that correspond to materials that are cited on Page -- Pages 14 through 34 of your declaration, Plaintiff's Exhibit 1?

MS. WEISKOPF: Object to form.

THE WITNESS: It appears to at the moment. I would have to compare them very, very carefully to know for sure.

MR. LESKO: Okay. Well, how about this? I'll represent to you as well that this is the

same office action that's -- you pulled excerpts from it. Not office action, I'm sorry, submission that you pulled excerpts from in your declaration on those pages. So that's true, you've seen this before, right? You've probably seen the submission because you reviewed it and then included it in your declaration?

THE WITNESS: Yes. If that's the same material that I included in my declaration then I have reviewed it.

BY MR. LESKO:

Q Okay. And so if you look at PDF Page 10, it says -- there's a paragraph third to last that says in addition. Can you read that paragraph out loud for the record?

A Sure. In addition, applicant has taken care to prepare the claims in a manner that does not fall within 35 U.S.C. Section 112, Paragraph 6. Specifically, applicant has undertaken to draft the claims in a manner that recites structure, material, or acts in support of the various operations. Applicant requests that the examiner inform applicant if he believes that any claim falls within 35 U.S.C. Section 112, Paragraph 6, so that appropriate amendments can

be made.

Q Do you recall during your review seeing this statement in the prosecution history that you reviewed?

A Yes.

Q Okay. So you've seen it before. Do you recall in your expert declaration, Plaintiff's Exhibit 1, did you comment on this statement?

A I don't believe so. As I mentioned before, the standard that I applied did not include intent. And also the claims that are being referred to here are different claims than the ones I opined on.

Q So you're aware of this statement and you -- but you didn't -- you had a reason why you believed there was no need to comment on it. Is that fair?

A Yes.

Q Now, what about the examiner's understanding of the claims? Would that be relevant to your analysis of claim construction?

A Might be something that I consider, but again, my understanding of the standard is not that the examiner gets to decide at this point in time whether or not the claims are covered by

Section 112, Paragraph 6, that -- that we need to apply the standard to the claim language and to the specification as it's written.

Q Well, generally speaking, would you say that comments by the applicant or comments by the examiner form part of the intrinsic record in reviewing claim language?

A They do, but they need to be considered appropriately with respect to the context and content of the comments.

Q So there are instances in your declaration where you quote, for example, comments made by the applicant in this case, CEV, during prosecution. Is that right?

A Yes.

Q And that's because you believed they were relevant to the intrinsic evidence for how they look at the claims. Is that an accurate statement?

A In those cases, yes.

Q But in this case, the statement that these are not prepared in 112, 6 and the request for the examiner to notify applicant if he disagrees, that wasn't relevant in your view?

A It wasn't necessary to comment on it in

order to provide the opinions in my declaration. It doesn't change my opinion as to whether or not these particular claims are covered by 112, 6. It doesn't, in fact, create structure or disclosure of structure in the specification. It doesn't link any disclosures of structure to the claimed functions. So there was an overwhelming number of factors to help me reach the conclusion that these were -- the elements that I opined on were 112, 6 elements, and that they were not supported in the specification in terms of structure, whether or not the applicant had suggested that it was their intent in these other claims to do it that way, or whether or not there had been a request to the examiner.

Q In your review of the file history, did you see the examiner flag anything as means plus function in any of the office actions for -- this is -- I'm sorry, this is the application corresponding to the '761 patent. So let me start my question again.

In your review of the '761 patent file history, did you ever see any instances where the examiner told CEV, the applicant, that he's construing the claims as means plus function?

A I don't recall seeing him comment on that issue one way or the other. And of course, even if he had, he would be using a broadest reasonable construction standard and not the standard that we're using today.

Q What's the difference in those standards?

A Again, I can't give you a legal opinion, but a broadest reasonable construction standard is generally broader than the plain meaning standard that we that we are using in court or the ordinary and customary meaning, I think, is the -- in view of the specification, I think is the language. Again, I don't remember the exact legal language, but I think it's in my report.

Q Well, it's interesting you raise it. So how does that affect the means test function determination here if we were looking at this from a broadest reasonable construction?

A I don't know if it does or not because I haven't looked at it from a broadest reasonable construction. But if there had been any comments from the examiner, which there weren't, I would have had to take into account that he may have been applying a different claim construction

standard.

Q If you could, Dr. Wolfe, please pull up Plaintiff's Exhibit 9.

(Whereupon, the above-referred to document was marked as Plaintiff's Exhibit No. 9 for identification.)

A I don't have a Plaintiff's Exhibit 9. Was that recently put in the folder?

Q Can you try refreshing the folder, please? It should be in there, but, you know, sometimes there's technical issues.

A Okay, I have it now.

Q Thanks. Okay, so here in the Plaintiff's Exhibit 9 -- well, first of all, do you recognize this document?

A It appears to be a portion of the file history. But again they are very similar. I can't tell you exactly which portion it is without comparing them page by page.

Q So if you go to Page 9 of Plaintiff's Exhibit 9, there's a date October 25th, 2019. Do you see that?

A I do.

Q Okay. So now if you go back to Plaintiff's Exhibit 1 and PDF Page 50 -- I'm

sorry, 60 of that document, there is a reference to the same date, October 25th, 2019. And then there's an excerpt from the file history that goes from Page 60 to Page 63 of Plaintiff's Exhibit 1. Do you see that?

A Yes.

Q Okay. And then actually on -- if you could scroll up to Page 58 of the PDF. It says in your Paragraph 54 -- I'm talking about Page 58 of Plaintiff's Exhibit 1. It says in Paragraph 54 on Page 58 of Plaintiff's Exhibit 1, the application leading to the '472 patent was filed on October 25th, 2019. The claims were amended the same day to the following, and then there's a footnote, Footnote 2. Do you see that?

A I don't see a footnote. This is on Page 58 of the document?

Q PDF, Page 58.

A Oh, I'm sorry.

Q That's okay. I know it's confusing when the page numbering differs. So just a -- yeah, 58 of the PDF, not your declaration page number.

A Okay. I do see that.

(Simultaneous speaking.)

Q There's a Footnote 2 there, and it says

original claims 21 through 22 issued as claims 1 to 2 of the '472 patent. Original claims 25 to 26 issued as Claims 5 to 6 of the '472 patent. Do you see the footnote?

A Yes.

Q Okay. So here there's a filing on October -- I'm referring to Plaintiff's Exhibit 1 now. It refers to a filing on October 25th, 2019, where the claims that issued of the '472 patent were actually filed, and then if you continue through Page 61 -- I'm sorry, Page -- PDF Page 63, there's the remarks that were filed with those claims. Do you agree with me?

MS. WEISKOPF: Objection to form.

THE WITNESS: I have included copies of the claims that were filed and some of the remarks that were filed with the claims.

MR. LESKO: Okay. And if you look at Plaintiff's Exhibit 9, Pages 4 through 6, those are the -- I'll represent to you those are the same claims that are copied into your declaration that we just discussed. And those remarks on Pages 7 through 9 are the same that are copied into your declaration that we just discussed.

THE WITNESS: Yes.

BY MR. LESKO:

Q Okay. So if that's true, then these are -- this is the filing of the claims that led to the same claims that issued in the '472 patent. Do you agree?

A It appears that way to me.

Q Okay. With this filing -- and frankly, maybe it's easier just go to your -- go back to Plaintiff's Exhibit 1, I'm sorry. On Page 63 -- I'm sorry, on Page -- let me withdraw my question and start again. Plaintiff's Exhibit 1, which is your declaration, on Page 62, there's a final paragraph there and then there's a sentence that starts in addition. Can you read that paragraph at the bottom of PDF Page 62 of Plaintiff's Exhibit 1?

A Applicant believes that no new matter has been added. In addition, applicant has taken care to prepare the claims in a manner that does not fall within 35 U.S.C. Section 112, Paragraph 6. Specifically, applicant has undertaken to draft the claims in a manner that recites structure, material, or acts in support of the various operations. Applicant requests that the examiner inform applicant if he believes that any

claim falls within 35 U.S.C. Section 112, Paragraph 6, so that appropriate amendments can be made.

Q All right, so based on your declaration, Plaintiff's Exhibit 1, that statement you just read to me was provided with the filing of the claims that issued in the '472 patent. Would you agree?

A The statement was made by the applicant.

Q And when it was made, the claims that were pending are those that issued in the '472 patent. Do you agree with that as well?

A They were. I disagree with the statements made by the applicant, but I agree that the applicant made those statements at the time that those claims were presented.

Q Okay. And, again, in the '472 patent file history, did you see any instance where the examiner flagged any claim element as 35 U.S.C. 112 Paragraph 6, means plus function?

A I didn't see him comment either way. I think the examiner did a poor job in -- in general here. I think that if the examiner had looked, they would have seen that new matter was clearly added to this application, and if they

had examined the claims carefully, they would have seen that they were within 35 U.S.C. 112, Paragraph 6. I didn't see any indication in the file history that the examiner had considered the issues in this paragraph at all.

Q Did you see any indication in the file history that the examiner believed any claim was 112, Paragraph 6. Yes or no?

A As I said, I didn't see any indication that the examiner had considered the issue one way or the other at all.

Q I'll ask you again. Did you see any instance in the file history where the examiner flagged any claim as being subject to 112 Paragraph 6 for the '472 patent?

MS. WEISKOPF: Objection, asked and answered.

THE WITNESS: I did not see any indication in the file history that the examiner had considered the question of 35 U.S.C. 112, Paragraph 6, at all.

MR. LESKO: Did you see any 112 rejections in the file history of the '472 patent?

MS. WEISKOPF: Objection, asked and

answered.

MR. LESKO: No, different question. Did you see any 112 rejections in the file history of the '472 patent, sir?

MS. WEISKOPF: Same objection.

THE WITNESS: Again, I don't want to give you a legal opinion here. I did see the examiner object that certain things were not supported by the specification. That was always part of a list of reasons for rejecting claims. So I haven't really considered whether or not that was the only reason for a rejection or one among many reasons for rejection.

MR. LESKO: Did you see any rejections that cited -- let's just put it this way. I'm not asking for a legal opinion. Did you see any rejections in the file history of the '472 patent that referred to Section 112, 35 U.S.C. Section 112?

THE WITNESS: I don't recall seeing that by name, but as I said, I recall comments through the complete history of this family of patents in which claims were requested, and the examiner responded by saying that certain elements of the claims were not supported in the specification.

That in my mind that is within paragraph -- or within Section 112, but I don't think that they were phrased that way by the examiner.

BY MR. LESKO:

Q Okay. So let's just go to Page 175 of Exhibit -- Plaintiff's Exhibit 1 which is your declaration. PDF Page 175. And there's a paragraph there, Paragraph 19 says -- 92 that says specifically, the examiner rejected the claims under Section 112. Do you see that?

A Yes.

Q So do your -- based on that statement, now, maybe this helps you remember, did you see in the file history of the '472 patent that the examiner rejected the claims that eventually issued in the '472 patent under Section 112 at one point in time?

A This was one of the rejections I was referring to before, where it was my understanding in reading the examiner's remarks that he did not believe that there was sufficient support and specification for what at the time was a claim element.

Q Okay. And so you would agree the examiner considered 112 issues in examining the

U.S. Patent -- the '472 patent?

MS. WEISKOPF: Object to form, vague.

THE WITNESS: In at least this one case he did consider a 112 issue.

MR. LESKO: But there was no means plus function assertion by the examiner that you're aware of?

THE WITNESS: I'm not aware of any discussion one way or the other about means plus function terms in the claims for the '472 in the examiner's file history.

BY MR. LESKO:

Q Okay. Sorry, I'm marking another exhibit here. Okay. You should see in the folder now Plaintiff's Exhibit 10.

(Whereupon, the above-referred to document was marked as Plaintiff's Exhibit No. 10 for identification.)

A Okay.

Q Were you able to open that, Dr. Wolfe?

A Yes.

Q Okay, great. Do you recognize this document?

A This is a patent where I'm named inventor.

Q Okay. And in this case, you're the only named inventor. Is that right?

A Correct.

Q Okay. Can you scroll down to Page 7 of this document, and then this is actually on Pages 7 and 8. Can you take a look at Figures 7B and 7C. Take your time there. Read those over to yourself, please.

A Okay.

Q Okay. Can you describe what's there in Figure 7B and 7C?

A I think, again, I haven't looked at this patent in 15 years or so, but just quickly looking at just those pages, it appears to be an exemplary algorithm for performing some of the functions disclosed in the patent specification.

Q Would you agree also that it's an example of program code as well?

A It's not program code. It's perhaps pseudocode. It's intended to express an algorithm or a set of steps. I guess it is described as exemplary program code, but it's not actual program code. It's not in an actual programming language. It's exemplary.

Q Okay. But a programmer reading this

would understand how to write this type of program, do you think?

A This would disclose an algorithm to a programmer that they could then implement in a system.

Q So the date on this patent is 2014. I understand there's some differences here, but if we're talking October of 2005 instead, let's just hypothetically say this same code was in this patent and the patent was dated October of 2005. Would you still agree that this discloses an algorithm for a programmer?

MS. WEISKOPF: Objection, vague.

THE WITNESS: Well, in the first place, I think that the date of relevance would be March 9th, 2009 when this was filed, not when it was issued. But this is -- in 2005, this would have been a disclosure of an algorithm. If one were to evaluate this patent, they would still have to determine whether it's a sufficient disclosure, whether it discloses enough of an algorithm to support the claims, whether or not it's sufficient to enable a person of ordinary skill to implement. I haven't done that level of a detailed analysis.

MR. LESKO: Right. I just would -- I guess I would say this type of code would have been available in 2005 as well? Is there any difference between this code and -- you know, this algorithm in 2005 versus 2009?

THE WITNESS: Yeah, I hadn't invented this algorithm in 2005. That's why I got an issued patent later for inventing it.

BY MR. LESKO:

Q How about the format of the algorithm, though, this if, you know, parentheses, traffic lane equals equals non HOV, and then --

(Simultaneous speaking.)

Q -- under that. Is that format, you know, a new format in 2009?

A No, no, I mean, the words, the punctuation were known, but the content of the algorithm, the sequence of steps, the specificity of the steps. That's the algorithm; that's the inventive step. And, again, I'm not making a judgment here today whether or not this is sufficient for the claims in this patent. But just the form of an algorithm is never sufficient to express an algorithm. You need its actual content as well.

Q Right. Okay. So this -- let me just ask you, not the specifics of this particular algorithm. Is there a name for this format of an algorithm? These if statements, else, if statements, is there a common name that maybe a skilled artisan would use to describe those types of statements?

MS. WEISKOPF: Object to form.

THE WITNESS: If someone described this as pseudocode, P-S-E-U-D-O code, I think a person of ordinary skill would generally understand what they're talking about. But, again, that's like saying a paragraph is made of words. It doesn't tell you what that paragraph expresses.

MR. LESKO: Well, like an if statement -- let me ask you first, maybe I'll establish a little bit of foundation here. Do you have some understanding of coding?

THE WITNESS: I have a very detailed understanding of coding.

BY MR. LESKO:

Q You have a very detailed understanding of coding. Okay, great. If -- this if statement, right, and then there's some lines

underneath it. Based on your detailed of understanding of coding, like what type of statement is that to a coder?

A It is a conditional statement. But, again, that's pretty meaningless in terms of understanding the content. It's like saying that a paragraph includes verbs and nouns. It doesn't tell you what the paragraph's expressing. It's the actual words, the order that they're used, and the specific way that they're formatted that would express the algorithm.

Q So if else or maybe if then, you agree those are called conditional statements in programming?

A It depends how they're used. But that that would be common, yes.

Q Why are they called conditional statements?

A Because under some conditions you would do one thing and under other -- sorry. Under some conditions you would do one thing, and under other conditions you would do something else, as a general concept.

Q And that general concept, just focus on that. I'm on the same page as you. That general

concept did exist as of 2005 in coding. Do you agree?

MS. WEISKOPF: Objection, vague.

THE WITNESS: The general concept of using conditionals existed. But, again, that's like saying the general concept of using verbs in sentences. It doesn't tell you anything about what's actually being expressed.

MR. LESKO: Yeah, I understand you need to know what the conditions are, but conditional programming was available and known to coders in 2005. Is that right?

THE WITNESS: It was available as a building block. But, again, the mere existence doesn't tell you anything. It depends on what the conditions are, what happens under each condition, and the overall structure of them. Simply the existence of a condition or one simple condition may not be enough to be an algorithm, and may not be sufficient to describe any particular function at all. You have to look at the totality.

MR. LESKO: So if I wanted to program something to happen based on a condition, could I use this type of code --

MS. WEISKOPF: Objection, vague.

MR. LESKO: -- as of 2005?

THE WITNESS: If you had a complete and sufficient description of the entirety of the algorithm in order to perform a specific function, then you could turn that into code.

MR. LESKO: Right. Well, like in this instance, for example, if I want to check time of query, I'm just looking at, you know, Exhibit -- what are we on, Exhibit 10. So in Exhibit 10 in your patent there's an item that says check time of query. So then it says if traffic lane equals equals non-HOV, check time of query. So is non-HOV the condition in that statement?

THE WITNESS: It is a partial condition in a portion of the statement that describes a portion of the algorithm. In and of itself, it's not the algorithm. The algorithm is the entirety of the description of functionality.

BY MR. LESKO:

Q I understand that. So traffic lane equals equals non-HOV, is that a condition in this code? Just one of the conditions in this code, maybe that's a better way.

A That is one condition in this code. It

is a tiny part of this algorithm.

Q And what would be returned from, let's say in the item -- and it doesn't really matter what the specifics of this patent are, but let's just use this as an example. Let's say traffic lane equals equals non-HOV. That's the case. What would be sort of returned in the code then?

A Well, again it depends on a lot of other things, the entirety of the algorithm. But if you look at it only at that locality then that condition, traffic lane is equal to non-HOV, would be either true or false.

Q Okay. And then if true what happens according to this particular example?

A If true in this particular example, if traffic lane was equal to non-HOV, you would proceed through a sequence, in order, of eight additional steps. Then you would test another condition. Depending on the result of that condition, you might perform a ninth step. If that condition is not true, then you would check another condition, in which case you might perform an alternative ninth step. And in that one particular case, which, again, is only a portion of the algorithm, that's what you would

do. That portion is likely not sufficient enough to support the claims in this patent. You probably need the remainder of the algorithm as well.

Q Okay. But it -- and that's helpful. But generally speaking then an if statement, like the first one here, that returns true or false, and then what happens next depends on the remainder of the code. Would you agree with that?

MS. WEISKOPF: Objection, vague.

THE WITNESS: In a very general sense, that's true. Again, you know, the remainder of the code could express thousands or millions of different algorithms. So you don't know much at all from that kind of a high level description.

MR. LESKO: So if traffic lane equals equals non-HOV here in Plaintiff's Exhibit 10 corresponds to a condition?

THE WITNESS: It is a test of a very specific condition that is a small portion of an algorithm.

BY MR. LESKO:

Q And the result of that test is true or false here?

A I don't know that I'd --

MS. WEISKOPF: Objection --

(Simultaneous speaking.)

THE WITNESS: One result is that you would evaluate that to be true or false, but in context of the entire algorithm, the result is that you proceed with another sequence of eight to ten steps.

MR. LESKO: Right. So just looking at that first step here on this page, the if parentheses traffic lane equals equals non-HOV end parenthesis. The result of that -- that initial step is a true or false?

THE WITNESS: No, I think that would be a mischaracterization. The result is that the evaluation of true or false guides you to which additional steps to take in the algorithm. So you may go through one set of eight to ten steps, or you may go through another set of eight to ten steps, or you may go through a third one. So there's lots of -- the algorithm is much more complicated than that, and the results are much more complicated than that. I don't think it's fair to look at just a single value and call that the result.

MR. LESKO: So the code here is a series of true or falses and then other steps that are taken as a result of the true or false, right?

MS. WEISKOPF: Objection, mischaracterizes testimony.

THE WITNESS: The overall algorithm here consists of evaluating a number of conditions. Those evaluations will result in a value of true or false, and then the algorithm describes a sequence of eight to ten steps that would be taken under each of at least four different -- well, maybe more, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 different combinations of conditional evaluations.

MR. LESKO: I'm marking Plaintiff's Exhibit 11. Just bear with me. Okay. Dr. Wolfe, can you pull up Plaintiff's Exhibit 11 please from --

(Whereupon, the above-referred to document was marked as Plaintiff's Exhibit No. 11 for identification.)

THE WITNESS: Yes.

BY MR. LESKO:

Q So I'd ask, have you ever seen this before?

A No, I am not familiar with JavaScript.

Q Okay. There's a statement here about conditional statements, pages one and two. Can you read pages one and two of Plaintiff's Exhibit 11 to yourself?

A Okay.

Q Do you agree generally with what stated here on pages one and two that you just read to yourself about conditional statements?

MS. WEISKOPF: Objection, vague.

THE WITNESS: I don't know. I don't know JavaScript.

MS. WEISKOPF: Can I also just put on the record that doesn't seem to be a date on this document. Is that right?

THE WITNESS: The last page has a copyright 1999 to 2025.

MR. LESKO: Yeah, I see that. Let's just make this simpler. It says here, very often when you write code, you want to perform different actions for different decisions. You can use conditional statements in your code to do this. Do you agree with that statement, Dr. Wolfe?

THE WITNESS: It depends what you're

coding language is. But in some coding languages that is true sometimes.

BY MR. LESKO:

Q But setting aside the date, as of 2005, can you use conditional statements in your code to perform different actions for different decisions?

A It depends on your development environment, but in some you could. Again, that doesn't tell you what conditions to test or what steps to take. It doesn't provide you with an algorithm, but as a very low underlying technique, it was available.

Q Would it have been known to your sort of definition of a skilled artisan in 2005 to use conditional statements in programming for that purpose?

A Yes. But again, it needs to be put into context. It would be in the same way that it would be known that a pen can be used for writing poetry. It doesn't help you understand the content of the poetry or what the poem should be.

Q So I'm marking here Plaintiff's Exhibit 12. And Dr. Wolfe, let me know if you're getting hungry for lunch, too. I'm fine either way.

(Whereupon, the above-referred to document was marked as Plaintiff's Exhibit No. 12 for identification.)

A Yeah, we should stop reasonably soon, but I don't have 12 yet.

Q Okay. It should be there now, I think.

A Yep. It's downloading now.

Q Great. Thanks.

A Okay.

Q Okay. Do you recognize Plaintiff's Exhibit 12?

A Yes. I haven't read it in more than a decade, but that is a patent on which I am a named inventor.

Q Okay. Column four of this patent -- actually, let's look at Columns two and three. Columns two and three say, at the very bottom of Column 2. The very last sentence, Column 2, Line 66, then it continues to Column 3, Line 4. Can you read that to me?

A Sure. In some examples the data may be sent from the backing storage to the cache in encrypted form only if certain conditions are met. For example, the data can be encrypted if the data are stored in encrypted form in the

backing storage, or if there is some other indication that the data should be encrypted before being sent.

Q Thank you, Dr. Wolfe. If you look at that, let's focus on Column 3, Lines 2 and 3 says the data can be encrypted if the data are stored in encrypted form in the backing storage. Does that statement provide an algorithm for the data can be encrypted?

A On its own, no, I don't think so. There's much more detail in this patent. There's flowcharts, and even then, I don't know for certain whether or not there's sufficient disclosure of an algorithm. I just haven't considered --

Q I'm not asking about supportable claims. Not at all. Let's just focus on the specific issue. It said the data can be encrypted if data is stored in encrypted form in the backing storage. And I said, what's the algorithm using just that excerpt for the data can be encrypted. Is there an algorithm there for how the data can be encrypted.

MS. WEISKOPF: Objection to form.

THE WITNESS: I don't know if there's a

legal rule here, but in my ordinary business as an engineer, I can't imagine describing that as an algorithm. It's simply a fragment of a sentence describing one characteristic of a system.

MR. LESKO: Well, for example, if you read this, would you understand it to mean if data equals encrypted form and backing storage, data is encrypted. Can you read that or understand that from reading that?

THE WITNESS: You could. Of course here we have the advantage that there's a flowchart in Figure 3 that actually puts forward the steps. There's more description later. I wouldn't normally take that sentence alone and consider it to be an algorithm.

BY MR. LESKO:

Q If it's an algorithm just for data can be encrypted, though it's a simple -- would you say it's a simple algorithm for that specific purpose?

A No, it doesn't tell you how to encrypt anything.

Q Does it tell you the answer to encrypt, yes or no?

A Under some circumstances it could, and then you would have to consider whether or not that's sufficient for any particular function. But again, I would not normally call that an algorithm in the way that I would normally define an algorithm, but it would depend on the context.

Q Right. And the context is I want to know the answer whether data should be encrypted. And so I write a program that says, if parentheses data equals encrypted form in the backing storage closed parentheses. And go to the next line. Data is encrypted. Just for that, is that enough disclosure to understand that's the corresponding program?

A I suppose that if you define your function narrowly and trivially enough, it could be. But certainly in the context of this specification, it's not an algorithm.

Q Well, it's not an algorithm for an entire claim element. I'm not asking you to review the claims in this, but it is an algorithm for that specific function, right?

MS. WEISKOPF: Object to form.

THE WITNESS: I mean, in in the real world, it would almost always be a step in an

algorithm, not an algorithm in and of itself. But if you defined your entire world as being that one step, then then maybe it could.

MR. LESKO: Maybe or yes it could?

MS. WEISKOPF: Object to form.

THE WITNESS: You would have to consider it in terms of what you're trying to accomplish. Again, if all you're trying to accomplish is exactly what those words say and nothing more than I suppose it could be an algorithm.

MR. LESKO: Would your answer be the same if we were talking about 2005 instead of 2009?

MS. WEISKOPF: Object to form, vague.

THE WITNESS: Yes. With all the limitations that I provided before.

MR. LESKO: Okay. So I'm marking another document as Plaintiff's Exhibit 13. You have Plaintiff's Exhibit 13. Do you have Plaintiff's Exhibit 13 now in your folder, Dr. Wolfe?

(Whereupon, the above-referred to document was marked as Plaintiff's Exhibit No. 13 for identification.)

THE WITNESS: I see it, let me download

it. Okay.

BY MR. LESKO:

Q Do you recognize this document?

A Well not really, but it appears to be a declaration that I prepared about five years ago. I definitely recognize some of the content.

Q Okay, I think that's right. If you'd like to maybe scroll down to Page 117, the last page. Do you see your signature on that page.

A Yes.

Q Does it look like a declaration you submitted and signed on December 5th, 2019.

A Yes.

Q Okay. There is a section, starting on PDF Page 18. Well, before I even ask you this, I'm sorry. Withdraw the question. But you can turn to Page 18. I'm looking at your CV, and it seems like you clearly have a deep understanding of touch sensitive display technology. Do you agree with that?

A Yes.

Q Okay. So touchscreens, touch sensitive displays, touch sensing on a display. So it seems to me reading your CV, that's an area where you have significant experience and expertise

based on what was presented.

A I think that's accurate.

Q And so, if you look at this Page 18, you go through starting in Paragraph 36, there are -- actually probably all the way through - it goes on for a while. All the way through Paragraph 53, you have a background of touch sensing technology, right?

A Yes. That may have been more than the Patent Office needed to know.

Q I suspect, though, you believe what's in here, I'm sure you believe all this is true and accurate, right?

A I do.

Q Okay. And it's based on your significant experience in that field, is that right?

A Yes.

Q Okay. So you reference here, PDF Page 18. At the beginning of this section, you refer to measurement and decision algorithms. Take a minute to look at that. There's a sentence there. It starts, in addition, innovations have been introduced in sensing circuitry measurement and decision algorithms and detection of motions

and gestures. If you read that sentence and kind of read the surrounding context, can you tell me what you're talking about in that section -- in that sentence, I should say, is more accurate?

A So in general, an algorithm is a detailed description of a process where you describe the steps to be taken, the sequence of steps, the conditions under which certain steps should be performed, and the data that should be evaluated in performing those steps and the results that should be provided. And over the years, people have developed a number of algorithms for measurement of touch data, for processing of that data to improve its quality and for making decisions based on that data. So, for example, whether you've tapped on the screen or whether or not you're trying to draw a straight line, and both in the patent art and in the non-patent literature, people have described many of those algorithms in substantial detail.

Q So as of October of 2005, those type of touch algorithms, they were around, is that right?

A Some were, there have been some very substantial improvements since then. I think

Apple in particular would contend that they made great improvements in some of those algorithms with the introduction of the iPad and the iPhone.

Q But certainly in 2005, algorithms existed to figure out where a user is touching a touch screen. Would you agree with that?

A Those algorithms did exist. There were many different kinds. Some were suitable for some things, others were suitable for other things.

Q Like an algorithm for saying, for example, there's an option displayed on a touch screen, and I want to know if a user touched that option or didn't touch it. Did an algorithm exist in prior art for that specific task?

A I don't know that there was one for that specific task. I mean, there was there was enough description of algorithms that a person of ordinary skill could have created an algorithm to select a specific item, but it would depend on what the item is, what its shape is, what its size is, how long you wanted the person to touch it before you recognize their touch. So you'd need to consider a number of factors in order to choose the appropriate algorithm or construct the

appropriate algorithm.

Q So I can select a menu option on a screen. I realize you could construct an algorithm, but let's say if I wanted to select from an existing algorithm, per se, I've displayed a button on my screen, did the user select it or not select it? Was that existing algorithm there and available as of 2005?

A There were a number of existing algorithms. Depending on the specifics, you would have to choose one. Is that button square? Is that button oval? Is that button round? Is it large? Is it small? Will somebody die if you pick the wrong button? So, if somebody just pokes at something, do you want to recognize that? So there were a number of algorithms and depending on the requirements of the specific situation, a person of ordinary skill could choose one.

Q Yeah, what if the requirement was very basic, like was there a touch or not a touch. Was that algorithm out there and available. So I don't -- it doesn't really matter to me how long just impressed the shape of it really doesn't seem that relevant. Let's say doesn't matter.

But I wanted to say did you touch the option or not touch it? Was that an algorithm that existed in the prior art?

MS. WEISKOPF: Object to form.

THE WITNESS: I don't think so. Not without regard to the shape, because otherwise I don't know how you would determine whether you touch something or you touched outside of it. I guess there was an existing algorithm of did you touch the screen at all? But if you wanted to select a particular object, then I think you need some information about the nature of that object to select an algorithm.

MR. LESKO: But there's multiple algorithms available for different objects on a screen at that time in 2005. So there was an algorithm probably for did you touch a circular object? There's probably an algorithm for did you touch a word? There's probably an algorithm for did you touch a square. Would you agree with that?

MS. WEISKOPF: Object to form.

THE WITNESS: I think those all probably existed. But again, the challenge would be choosing the right one.

MR. LESKO: So I'm putting in the folder Plaintiff's Exhibit 14. Are you able to access this item?

(Whereupon, the above-referred to document was marked as Plaintiff's Exhibit No. 14 for identification.)

THE WITNESS: Hasn't refreshed yet? Give me a second.

BY MR. LESKO:

Q Sure.

A I think we got it. Okay. I have it.

Q Okay, do you recognize that document?

A Yes.

Q What is it?

A This is a patent application that I filed in 2009 that has been issued as a patent.

Q Okay, and so what we're looking at, though, just to clarify, in Plaintiff's Exhibit 14 is the issued patent, do you agree?

A It is.

Q So let's just scroll down to Column 1, really underneath the heading background, the very first sentence. Can you read that sentence out loud?

A Touch screens are widely used for

inputting data in a variety of electronic devices, including handheld devices such as mobile phones and cameras.

Q Do you agree with that statement as of the filing date for this patent application that led to this patent?

A Yes.

Q Okay. So let's go back to October in 2005. Would that statement also be true?

A Probably not.

Q What would be different in 2005?

A I don't think it was widely used in either mobile phones or cameras in 2005.

Q So have you kind of amended this to say touch screens are used for inputting data in a variety of electronic devices, including handheld devices such as mobile phones and cameras. You amended it to say that in 2005. Would that be accurate?

A I think it would.

Q You said it would?

A Yes.

Q Okay. I'm sorry, you cut out for a minute there. Sorry, I lost my place here. Oh, okay. There's another statement here in this

Column 1 of Plaintiff's Exhibit 14. It's the last sentence in this background section. It starts with the word rather. Can you read that sentence out loud?

A Rather by touching the touch screen, a change is sensed in the touch screen panel and a touch screen controller couples the sensor to a driver and/or computer processing unit, CPU, and translates information from the touch sensor into data usable by the driver CPU.

Q What does that mean?

A That means that in prior art touch screens, there would be a touch screen controller which would measure signals from a touch screen sensor and generally inform a CPU about those signals by translating the measurements into a more usable form that the CPU could interpret. Typically where and when the touch had occurred.

Q What format was it translated to for the CPU?

A It would vary. Typically some descriptive message. That would say something like there's been a new touch at this X coordinate and this Y coordinate.

Q Now, that statement we were just

discussing those starts with the word rather and ends with the word CPU in Plaintiff's Exhibit 14, was that statement true in October 2005?

A I believe so.

Q I think you refer here to the prior art, right? I realize we're talking 2009. So prior art in 2005. This statement that starts with rather, ends with CPU in Plaintiff's Exhibit 14 still applies to that prior art. Is that right?

A In general, yes.

MS. WEISKOPF: Objection.

MR. LESKO: Would the prior art touch screens have algorithms for handling that translation that's discussed here and also referred here in Plaintiff's Exhibit 14?

THE WITNESS: They would. Those algorithms would differ from system to system and sensor to sensor. But they would use algorithms. And in fact, in this patent Figure 6B describes an algorithm for this particular touch screen.

BY MR. LESKO:

Q Okay. Where did you say there's an algorithm for this particular touch screen?

A Figure 6B.

Q Figure 6B.

A Yeah.

Q So that's an algorithm for translating touches to the CPU in this particular system in 6b?

A No, this is an algorithm for sensing.

Q Okay.

A And it's only a portion of the description of the algorithm.

Q So 6b is part of an algorithm for touch sensing used in the system described in this Plaintiff's Exhibit 14?

A It's a portion of the description of an algorithm for sensing.

Q Okay. So this patent gets into some maybe new algorithms for sensing. But based on the background here, what we just discussed, existing algorithms for sensing did exist. Do you agree?

A For different kinds of touch screens than this one, they did.

Q And then algorithms existed for quote translating information from a touch sensor into data usable by the driver/CPU. Do you agree?

A A variety of algorithms did exist, depending on the particular structure and

configuration of the touch screen.

Q And that was the case in 2005, those algorithms are available?

A For touch screens that existed in 2005, they included algorithms that would format the data and present it to a host computer or a main CPU.

MR. LESKO: Would you like to take a lunch break now or would you like to keep going, Dr. Wolfe? I'm just trying to be polite.

THE WITNESS: No, we can take a lunch break now.

MR. LESKO: Okay. That works for me.

MS. WEISKOPF: How long?

MR. LESKO: Let's go off the record if you could, Eric.

COURT REPORTER: Yes, we're off the record at 12:29 p.m.

(Whereupon, the above-entitled matter went off the record at 12:29 p.m. and resumed at 1:19 p.m.)

COURT REPORTER: We're back on the record at 1:19 p.m.

MR. LESKO: Okay, Dr. Wolfe, I've uploaded the exhibits folder Plaintiff's Exhibit

15. Could you open that, please? Oh, I'm sorry. Before we get to that, during the break, did you talk to Counsel at all? Ms. Weiskopf?

THE WITNESS: No.

MR. LESKO: You did not talk?

THE WITNESS: I did not talk to Ms. Weiskopf during the break.

MR. LESKO: Okay, not on the chat or anything either. Just not at all?

THE WITNESS: I did not communicate with her in any way outside of what you see on the record.

BY MR. LESKO:

Q Okay. Thanks. So back to Plaintiff's Exhibit 15, please. Is that open on your screen?

(Whereupon, the above-referred to document was marked as Plaintiff's Exhibit No. 15 for identification.)

A Not yet. But it's coming.

Q Have you ever seen this document before?

A No.

Q Did you say yes or no?

A No.

Q Oh, okay. Okay so, if you could just read the first two sentences there. It says, an

if statement is a fundamental control structure. Can you start there, please?

A Sure. An if statement is a fundamental control structure in programming languages that allows you to execute specific code blocks based on whether a condition is true or false. It is used to make decisions and control the flow of execution in your program.

Q Thank you. Do you agree with that statement?

MS. WEISKOPF: Object to form, vague.

THE WITNESS: The statement is vague. It would be true for some programming languages. But not for others.

MR. LESKO: So what's an example of a programming language where an if statement means something different? From what's --

THE WITNESS: Programming languages that don't have if statements.

BY MR. LESKO:

Q Okay. So there's a programming language that doesn't have an if statement specifically. What's an example of that?

A Certainly true in assembly language. I believe it's true in Lisp, but it's been a couple

decades since I programmed in Lisp. Again, I don't know every programming language, but it's not a requirement for programming languages. There are different programming languages that work in different ways.

Q Would they usually have an equivalent to determining whether a condition is true or false? Do most programming languages have that type of ability?

A Some do and some don't.

Q All right. So just scroll down if you could to Page 2. There's a statement that says, an if statement consists of two main parts and then there's two bullet points. Can you just read that sentence and those two bullet points for me, please?

A An if statement consists of two main parts. The condition, this is an expression that evaluates to either true or false, and a code block. This is the code that will be executed if the condition is true.

Q Was that statement consistent with your understanding of an if statement in programming?

MS. WEISKOPF: Objection, vague.

THE WITNESS: Consistent with the way

some programming languages are implemented, but not all.

MR. LESKO: So did an if statement consisting of these two main parts exist in 2005?

THE WITNESS: It existed, again, as described as a building block. It's not an algorithm.

BY MR. LESKO:

Q So an if statement consisting of condition and code block existed as a building block for code in 2005?

A It did.

Q A skilled artisan in 2005, like the skilled artisan defined in your declaration, Plaintiff's Exhibit 1, will be familiar with that if statement in that format?

A They would and they would also know what additional information they needed in order to use it effectively.

Q Okay. So you can close the document if you'd like. Have you ever heard of data roaming?

A Depending what context.

Q Yeah. In the context of cellular networks and cellular phones. Have you heard of the concept of roaming?

A Yes.

Q Are you familiar with -- can you describe what that concept is. What is roaming?

A It's used in a number of different ways. The term does not appear in the patents. It was used commercially by a number of vendors, in a variety of ways, to represent obtaining service that was not from their own supported cell towers. And it might include simply using towers of other vendors that have a cooperation agreement without any financial impact. It could include using vendor towers -- from other vendors where there is some differential in pricing. Or it could sometimes involve using a secondary communication system that might be incompatible, as if you were in another country and there was a secondary form of communication supported. It's somewhat time dependent, because in practice the most common usages have changed over time.

Q All right. So let's talk about usage in 2005. The usage of the term roaming when discussing cell phones and cellular networks. What did that mean in 2005?

A I think in general --

MS. WEISKOPF: I'm going to object.

This is very far outside the scope of Dr. Wolfe's declaration.

THE WITNESS: Right, so as I mentioned, it's not a term that's found in the patents or the claims, but in general it meant using -- connecting to a tower that was not operated by your primary service provider. Whether or not that was transparent to you or whether it had some impact on your usage patterns either way.

MR. LESKO: I'm reading -- I know you haven't seen this. I'm reading something from T-Mobile's invalidity conventions, it says, quote long before the priority date of the asserted patents, it was well-known that users were allowed to select their home network or could switch roaming off to prevent data upload or download if there are roaming charges, end quote. Do you agree with that statement?

MS. WEISKOPF: I'm going to object. He hasn't reviewed the contentions, he hasn't seen the document. And this is very far outside of his testimony that he's offering.

THE WITNESS: So again, I haven't seen that statement in context, that could change my opinion. But in the 90s, I think, you know,

prior to unlimited plans and such, I do recall there being options to turn off roaming, in some systems.

MR. LESKO: So before the priority date, it was well known that users were allowed to select their home network or can switch roaming off to prevent data upload or download if there are roaming charges. Would you agree with that?

MS. WEISKOPF: Same objection as before. It's very far outside the scope, and he hasn't seen what you're reading from or what is cited or anything.

MR. LESKO: Okay. You don't need to have speaking objections, Ms. Weiskopf. Your objection is noted.

MS. WEISKOPF: Well, I think maybe what we can do is for this entire line of questioning about roaming and you reading from the invalidity contentions, I'll just keep the same objection and I'll just say same objection. Is that okay with you?

MR. LESKO: Sure. Objection, scope? Is that your objection?

MS. WEISKOPF: And also that it's out of context. So, it's sort of mischaracterizing the

statement.

MR. LESKO: I don't think that's a proper objection. What's your objection that you want to maintain?

MS. WEISKOPF: Vague. That it's vague and that it's outside of the scope of any opinion that he's offering.

MR. LESKO: So objection, vague, objection, scope? That's what you want to maintain?

MS. WEISKOPF: For sure. And then I'll add more if I --

MR. LESKO: Okay.

THE WITNESS: So if I take that statement out of context, then I do believe it was true.

MR. LESKO: Okay. And there's a lot of discussion in between, I just want to -- I know you've kind of answered this, so I just want to say -- so it was well known. Regardless of the context here, I'm just asking you, was it well known that users were allowed to select their home network, or can switch roaming off to prevent data upload or download if there are roaming charges before the 2005 priority date?

THE WITNESS: Again, taking that statement out of context, it sounds like it's true to me in 2005.

BY MR. LESKO:

Q So if roaming -- if the phones -- if that was a -- let me withdraw my question. In order for a user to be able to turn roaming on or off, does the cell phone need to determine if it's roaming?

A No.

Q And here's another way to phrase it. Cell phones in 2005, could they determine and report to a user that they were roaming or not roaming?

MS. WEISKOPF: Object to form, foundation.

THE WITNESS: Some could, some couldn't. It would depend on the phone. It would depend on the provisioning by the provider. It would depend on the way the network had been set up. There are lots of conditions that you would have to evaluate.

MR. LESKO: So you were familiar with cellular phone technology in 2005?

THE WITNESS: Yes.

MR. LESKO: Okay. And would you agree that cellular phones existed that had the capability to determine if they were roaming or not roaming?

MS. WEISKOPF: Object to form.

THE WITNESS: There were cell phones that existed as the capability of indicating whether they were roaming or not roaming. Without doing a much deeper investigation, I couldn't tell you whether or not they were making that determination, or whether or not they were communicating back with a carrier who was making that determination elsewhere.

MR. LESKO: So did programming exist in 2005 to make that type of determination, i.e. roaming or not roaming?

THE WITNESS: It existed somewhere. But as I said, I can't tell you for sure without doing some more analysis whether it existed on the phone platform.

MR. LESKO: So if it didn't exist -- so if it existed on the phone platform, then you're saying there might be software on the phone that determines if it's roaming or not. Is that what you mean by that?

MS. WEISKOPF: Objection, vague.

THE WITNESS: Again, I can't confirm that that was ever implemented. But hypothetically, it's possible that somebody could do that. They would need an algorithm to be defined and a set of criteria.

MR. LESKO: And so in, what's the other way? Would there be an algorithm on a, would there be a signal from the cell tower that tells you it's a roaming or not? Is that a possibility?

MS. WEISKOPF: Objection, speculation.

THE WITNESS: I don't know if there would be a way to do that directly. Again, it might be possible. You would need to define the criteria. It's also quite possible that you simply get a cell phone tower ID and that you send that back to your carrier, and your carrier determines whether it's their tower or not their tower.

MR. LESKO: So the tower ID, where does that come from that you're referring to in your last answer?

THE WITNESS: Again, if it exists, it may exist in some systems. It may not exist in other systems. But it wouldn't be communicated

from the tower to the phone.

BY MR. LESKO:

Q Well, just set aside roaming. And you said you know about cellular phone technology and cellular network technology in 2005. Is that right?

A Yes.

Q Okay. Are you aware -- was there technology for cellular phone to receive a tower ID from a network to which it was connected in 2005?

A I can't tell you for certain. I think it probably existed in at least some systems, but maybe not in all systems.

Q When you say probably existed, what do you mean by that? Are you aware of it existing at all, or can you confirm there's any situation where it existed that a phone could receive a tower ID from a cellular network?

MS. WEISKOPF: Object to form.

THE WITNESS: Not as a factual matter. Without going back and reviewing the protocols again, I would expect it to be the case in some protocols and not in others. But I don't know factually, one way or the other for any

particular protocol.

MR. LESKO: So you reviewed Dr. Hughes's declaration Exhibit 4 in preparing your declaration in this matter, is that right?

THE WITNESS: I did.

BY MR. LESKO:

Q Okay. And do you recall he mentioned data roaming in his declaration?

A I do remember that he mentioned it, but I'd have to go look to see where and in what context.

Q Okay. But you didn't have any reason to consider his opinion on data roaming in putting together your declaration?

A I considered all of his opinions with respect to the controller elements. But once again, data roaming is not in the specification. It's not in the claims. I was asked to look at specific issues and that is whether or not the word controller itself had sufficient structure to implement the claims without looking to the specification. I concluded it did not. And then whether or not the specification provided sufficient support for the claimed functions. None of that information had anything to do with

roaming, because roaming is not mentioned in the specification and it's not mentioned in the claims.

Q You talk about the structure of the controller, whether it's insufficient structure. What do you mean by that?

A So the question is would a person of ordinary skill understand -- one of the questions is would a person of ordinary skill understand in the context of the claim, from the word controller alone, what structure is being claimed? And the answer is no, the way that that's used in that particular claim, there is no specific structure known to a person of ordinary skill for a controller that, on its own, absent a specific algorithm, is capable of performing the claimed functions.

Q So when you say structure, are you referring to hardware? Hardware plus programming or programming? What are you referring to specifically? What would provide structure? First let me ask you, could it be just the hardware item itself? Could that provide structure?

MS. WEISKOPF: Objection, form.

THE WITNESS: In the abstract, yes. But you've really pointed out one of the problems here is that in the context of this claim, the word controller alone doesn't tell you whether or not it's claiming hardware or software or hardware and software together. So you need to look to the specification to understand that, and you need to look at the claimed functions in order to understand what's actually being claimed in terms of structure.

MR. LESKO: Could structure for the claim also be provided in the form of a program for the controller? Was that another structure based on your understanding of what we've been instructed on the law?

THE WITNESS: Yes. If a program had been disclosed and if that program had been linked to the claimed functions and the term controller in a way that a person of ordinary skill would understand those relationships, then that would be sufficient structure. If you had a program that was disclosed that performed the claim function and was linked to the claim function, I think that that could be the right structure. I did not see that here.

BY MR. LESKO:

Q One of the claim itself, you sort of described in words, the program for the controller. Is that something you considered whether the claim itself described in words a program or the controller?

A I did consider that. I don't believe that the claim language itself describes the structure of the controller or an algorithm for a processor that would be the controller in sufficient detail to perform the claimed functions. It simply recites the functions. And also, I don't think that the functions that are claimed are completely supported in the body of the specification.

Q So the program in the claim, though, that you're looking for, it wouldn't have to be, per se, actual software code. Would you agree with that?

A No, it would need to be the structure of a program that was more than simply the function of the program.

Q Okay. So like I -- like you said, if there was an algorithm in the claim, you know, even if it wasn't an if else statement, let's

say, or formal programming language, there could be a structural program in the claim. And you were looking for that when you were reviewing these claims. Is that correct?

A I did look for that. I did not see a structural program. I only saw functions described in the claim. And as I mentioned, I did not see support for all of those functions in the body of the specification.

Q Well, let's turn to Plaintiff's Exhibit 3, Dr. Wolfe.

A Okay.

Q Thanks. Let's go ahead and scroll down if you could, to PDF Page 32 of Plaintiff's Exhibit 3, which is -- I don't think you would agree those are the claims of the '472 patent. Do you agree with me?

A Yes.

Q Okay. So on Line 24 through 26 in Column 17 there's language that says, during any period direct -- detected by the controller in which all three of the following conditions are met. Can you see that?

A I do.

Q What does that mean? During any period

detected by the controller in which all three of the following conditions are met?

A Needs to be taken into context. It talks about a function of automatically connecting to a picture hosting service that is internet based, and enabling an upload to the picture hosting service over the internet and via the cellular interface of a group of image sensor captured pictures stored in the local memory. And then it says when that function should be performed during any period detected by the controller, in which all three of the following conditions are met, and then in functional terms, it describes three conditions.

Q So, reading that language, if conditions one, two, and three in the claim are met, Element f(ii) of claim one of the '472 patent is carried out. Do you agree?

MS. WEISKOPF: Object to form, vague.

THE WITNESS: I don't see the word if, right? If I saw the word if, to me if it were being written in the form of an algorithm, it would mean if and only if. Where in a claim, it's my understanding that that's not something that I can assume. So I have not put that

limitation on that.

MR. LESKO: So how would you interpret the language during any period?

THE WITNESS: It's a comprising claim. So I would interpret it that -- again I have to interpret it probably in light of the -- of the file history where the applicant kept explaining that it doesn't just mean during any period, but what it says is, I think that the particular automatic connection and uploading that's described in this limitation has to happen during any period of time determined or detected by the controller, which again, we don't really have structure for, in which each of those three conditions are met.

And as I mentioned before, at least one of those conditions, maybe two or three, really are not supported in the specification. So it means that you have to determine using data from the cellular interface that you are -- that the system is within a period without potentially increased cellular network access fees. And you also have to determine from -- that you are connected to the internet via the cellular interface. And you also have to have determined

that at least one picture captured by the phone sensor, and not from somewhere else, has been designated through the touch sensitive display and not some other way, as being part of the group of pictures to be uploaded to the picture hosting service. So at a minimum, all those conditions have to be true. But it's a comprising claim, so I don't see anything that says that you can't also upload when one of those conditions is false.

BY MR. LESKO:

Q So you're talking about outside the scope of the claim, there's a possibility the same system performs other uploads? Is that what you're suggesting?

A No, I'm saying within the scope of the claim, there's a possibility that it performs other uploads based on my understanding of a comprising claim. As long as you meet all the limitations of the claim, you can do other things as well. And I don't see any place where it says only, or if it says only if or anything like that. It simply says that under those three conditions, you can automatically upload pictures.

Q Are you saying you can or you must under those three conditions according to Element f(ii)?

A That you are configured to.

Q All right. So -- just looking at Claim 5, do you see Claim 5?

A Yes.

Q So it says, during any period detected by the controller in which all the following conditions are met.

A Yes.

Q So, if all four of these conditions are met, what happens according to the claim?

A If all four of the conditions are met, according to the claim, you will automatically connect to a picture hosting service that is internet based and enable and upload to the picture hosting service over the internet and via the cellular interface of a group of image sensor captured pictures stored in the local memory. But again, I don't see that as being -- well, that is a limitation of the claim. I don't see anything that says that that's the only time that you can upload pictures.

Q Right, I understand what you're saying

there. I understand your argument. But what I'm saying, though, is if those four things happen, then element (ii) is carried out. Would you agree with that?

A That's true. I think that's a functional description of a system, not an algorithm.

Q If condition 1, condition 2, condition 3, and condition 4 are all true, then it will automatically connect to a picture hosting service that is internet based and enable and upload to a picture hosting service over the internet. And via the cellular interface, give a group of image-sensor captured pictures stored in a local memory. Do you agree with that?

MS. WEISKOPF: Object to form.

THE WITNESS: I don't think so. It doesn't say if, and if you're using if as a code construct, then I would disagree. What it says is that during a period where those conditions are met, it will perform the upload that was previously described.

MR. LESKO: What's the difference between during any period and if, in your view?

THE WITNESS: Well, again, if you're

using if not in plain English language, which would depend on context, but if you're using if in the way we would use it in an algorithmic construct, then it means if and only if, which is not what I see described here.

BY MR. LESKO:

Q And you're basing that conclusion on the use of the word comprising?

A The use of the word comprising and the structure of the claim as a whole. It would have been very easy to say only during, if that's what the patentee intended.

Q So in the structure of an if else statement, is it always only if?

A In the programming languages that I'm familiar with at the moment, yes. Again, you can build your own programming language, do anything else. I'm sure there are thousands of programming languages out there. But in the way that I would describe an algorithm to a person of ordinary skill, I use if to describe things that only happen under a certain condition, else to describe things that happen when that condition's false. And if you have things that can happen that happen whether or not the condition is true,

then you do them outside of the if else statement. But that's why we write pseudocode and build flowcharts is because they're precise as opposed to language, which can be more ambiguous than in written English paragraphs.

Q How would that look, those conditions you say that fall outside the if or outside the else, how would they look in the code?

MS. WEISKOPF: Object to form, vague.

MR. LESKO: So that would be a different structure? What would that look like?

THE WITNESS: It would simply perhaps be -- again, it depends. You have to actually have the algorithm to know what it would look like. But, hypothetically, it could happen before an if statement or instead of an if statement, or after an if then else statement had completed.

BY MR. LESKO:

Q I'm going to go to the '472 patent, Column 1, Lines 55 to 60. Can you scroll to those pages, Dr. Wolfe? Let me know when you're there.

A I'm at Column 1, Line 55.

Q All right. So this says U.S. Patent numbers 4,951,079, 6,021,278 and 6,101,338 are

herein incorporated by reference. You see that?

A Yes.

Q Do you know what that means, incorporated by reference?

A I do. My understanding is depends a little bit on the language that, that is used.

Q So during your review of the file history, though, did you see the statement in the '472 patent?

A I did.

Q Did you say yes?

A Yes.

Q Okay. And during your review of the '761 patent, did you see an equivalent statement in that patent?

A My recollection is I did, but let me check. Yes, I did.

Q Okay. So do you understand that if a patent incorporates another document by reference and incorporated materials treated as if it were explicitly included in the patent itself?

MS. WEISKOPF: Object to form.

THE WITNESS: I do, but it's also my understanding that when it's incorporated in a form like this, where it's incorporated with

respect to a particular issue, that it's being incorporated with respect to its teachings about that issue.

MR. LESKO: Can you pull up the declaration of Dr. Hughes, I think it's Exhibit 4, please?

THE WITNESS: Okay.

BY MR. LESKO:

Q Okay. This is Paragraph 30 of our Dr. Hughes declaration. Do you share that same understanding of incorporation by reference?

A That's my general understanding. Although, as I said, it is my understanding that under current law that if a patent is incorporated by reference with respect to a specific feature of the claims, then it only needs to be reviewed -- or it only needs to be incorporated with respect to that feature. And that's my interpretation of the language in these two patents.

Q If you look at paragraph -- could you scroll down to paragraph 41 of Dr. Hughes's declaration?

A Okay.

Q This one refers to the '278 and '338

patents to Bernardi.

A Okay.

Q Did you -- in forming your opinions, did you read either of those patents or look at them?

A I didn't because there's been no suggestion that the sensory RSC-164 chip has been linked to the claimed functions, or that there has been an algorithm presented in those patents for the claimed functions.

Q So just looking at -- just read paragraphs 41 and 42 of the declaration here to yourself, that's exhibit -- Plaintiff's Exhibit 4.

A Yes.

Q Do you agree or disagree with the statements in paragraphs 41 and 42 here?

A I agree with those statements as presented for the purpose of doing voice recognition in the '278 and '338 patents. The RCS 164 microcontroller is disclosed.

Q In paragraph 44, it says, it's my opinion, it starts there, it says, it's my opinion, though, that a POSITA would have been the aware of the materials such as those that the inventor specifically incorporated by reference

or as patent specification, including the RSC-164 family of controllers. Reading this Paragraph 44 of the Hughes declaration, do you agree or disagree with this paragraph?

A As I understand it, I agree with it because what it does not say, well, no, no. It's ambiguous. If they're talking about a claimed controller in Exhibits 2 and 3, then I disagree. A person of ordinary skill would have known of the RSC-164 family of controllers. They would not know of its suitability for the functions claimed in Exhibits 2 and 3, and they would not have known the structure of the algorithms that are attempting to be claimed in Exhibits 2 and 3.

Q Looking at Paragraph 45 of Dr. Hughes's declaration. It refers to three dictionary definitions for controller.

A Yes.

Q Do you believe that those dictionary definitions reflect the understanding of a skilled artisan as of 2005 for what a controller means?

A Well, one of those is from 1996. It's a little early. But the question is a controller in what context? I think that those reflect what

a controller would be in a certain context. I don't think they reflect what the controller is being claimed. And also, if you read these definitions, none of them recite specific structure. They all talk about general categories of structure, and they talk about either things that have particular functions, which means they're functional descriptions, or they talk about things where the functionality depends on their programming.

And my understanding is that when you claim a function of a controller or a processor in a claim, if that function is specialized, then you need to disclose the algorithm for that specialized function. And none of these definitions change that or disclose -- none of these disclose an algorithm. None of these disclose a specific structure rather than just using other general words to describe it. I mean, look at -- one of these is a circuit mechanism device or system which monitors one or more variables. That's not specific structure.

Q So you don't think a circuit is a structural term?

A It's not a description of a specific

structure. If you sent me off to go get you a circuit, it's very unlikely that I would bring you back what you wanted because you haven't told me with enough specificity, what you expect.

Q So what if it is -- so it's usually contained on a single chip, circuit board or device. Do you know what I mean when I say it's contained on a chip? Is the chip a structure?

MS. WEISKOPF: Object to form.

THE WITNESS: Chip is a structure. But again, that's not saying what it is. It's saying what form it takes. It's like saying it comes in a box. It doesn't tell you the structure of the underlying thing. And again, if you look at the total description there, it uses the word device. Device is a nonce term.

BY MR. LESKO:

Q Let's turn to Paragraph 46. It refers to Judge Albright's prior opinions. So does 47, frankly. Did you read any of these prior opinions that are listed in Paragraphs 46 and 47?

A I did not.

Q So do you have any opinion on whether Dr. Hughes's statements in 46 and 47 are accurate?

A I don't know if they are or not. I haven't seen Judge Albright's reasoning. I haven't seen whether or not he was provided with all the facts when he made his judgment.

Q Would you think there'd be any reason to investigate those opinions in Paragraphs 46 and 47?

A No, the fact pattern for each one of them is different. They all are in different claims, different patents, different specifications. And I wasn't asked to make a legal judgment. I was asked to determine whether or not a person of ordinary skill would understand sufficient structure for the term controller as it's used in a specific claims in this matter, and whether or not there was sufficient structural or functional support in the specification.

MR. LESKO: So I think that's all my questions for today, Dr. Wolfe. I appreciate your time. So thanks for taking the time to speak with me today. Thank you.

MS. WEISKOPF: I'm going to have a little bit of redirect. Can I have a one or two minute break, five minute break before we do it?

MR. LESKO: Thirty seconds I'll give you. I'm just kidding. Five minutes is fine. Is that how long you want?

MS. WEISKOPF: Yeah, maybe just --

MR. LESKO: Five or ten. Either fine for me.

MS. WEISKOPF: Yeah. Let me just have five, please.

MR. LESKO: Okay.

MS. WEISKOPF: Thank you.

MR. LESKO: So we'll see at 4:20 p.m. my time.

MS. WEISKOPF: Sounds good. Thank you, Justin.

MR. LESKO: Sure.

COURT REPORTER: All right. So we're off the record at 2:13 p.m.

(Whereupon, the above-entitled matter went off the record at 2:13 p.m. and resumed at 2:20 p.m.)

COURT REPORTER: We're back on the record at 2:20 p.m.

CROSS EXAMINATION

MS. WEISKOPF: Okay. Dr. Wolfe, do you recall discussing the functions in the asserted

claims with Mr. Lesko?

THE WITNESS: Yes.

BY MS. WEISKOPF:

Q Okay. Can we please turn to Plaintiff's Exhibit 2, which is the '761 patent?

A Yes.

Q Okay can you please look at the portion of the claim labeled one, two and three?

A I have that.

Q Do you have an opinion about whether there are any functions of the controller in this portion of the claim?

A The controller is configured to automatically connect under certain conditions. So automatically connecting under the recited conditions is a function.

Q Do you have an opinion whether the controller functions to determine that the upload is allowed based on the selected upload option and uses data from the cellular interface?

A That is a controller function, yes.

Q Do you have an opinion on whether there's structure in the claim sufficient to perform that function?

A I'm not even sure I saw a description of

the function in the claims -- whether there's structure in the claims? There's certainly not structure in the claims. The only structure in the claims is controller, and not every controller can do that. An ordinary controller can't do that. It would require either specialized hardware or specialized software, neither of which are disclosed in the claim.

Q And do you have an opinion whether there's an algorithm in the specification to support that function?

A There is not one.

Q Okay. Let's turn to Plaintiff's Exhibit 3, which is the '472 patent.

A Okay.

Q Do you recall discussing what's labeled one, two and three and claim 1 with Mr. Lesko?

A Yes.

Q Alright, do you see any functions of the controller in this portion of the claim 1 of the '472 patent?

MR. LESKO: Objection, scope.

THE WITNESS: I'm sorry. Yes.

MS. WEISKOPF: Do you have an opinion whether the controller is configured to detect

that the upload is allowed because the system is within one of the periods without potentially increased cellular network access fees, as determined using data from the cellular interface?

THE WITNESS: Yes, the controller must detect that condition.

BY MS. WEISKOPF:

Q Is that a function of the controller?

A It is a function of the controller.

Q Do you have an opinion whether there's structure in the claim sufficient to perform that function?

A There is not sufficient structure in the claims to perform that function.

Q And do you have an opinion whether there is structure in the specification sufficient to perform that function?

MR. LESKO: Objection, outside scope.

THE WITNESS: I don't believe there is. There is a description of a cellular interface that's been added that I don't think was supported in the original specification, but that's not sufficient to describe this function. This function is more complicated than just

requiring the existence of a cellular interface. It would require an algorithm or specialized hardware structure.

MS. WEISKOPF: Okay, let's turn to claim 5 and look at the portion of the claim in F2. Do you have any opinions whether there's functions in this portion of the claim?

THE WITNESS: Yes. The functions to automatically connect under the four specified conditions, and also that the controller must detect those conditions are present. Those are functions.

BY MS. WEISKOPF:

Q Okay. Looking at the at the portion of the claim with a label two, the numeral two, do you have an opinion whether the controller is configured to confirm that the camera system is within a period without potentially increased cellular network access fees, as determined using data from the cellular interface?

A The claim requires that the controller be configured to perform that function.

Q Do you have an opinion whether that's a function?

A As described in claim 5 it is a

function.

Q Okay. Do you have an opinion whether there is structure in the claim sufficient to perform that function?

A There is not sufficient structure in the claim.

Q And do you have an opinion whether there's sufficient structure and the specification to perform that function?

MR. LESKO: Objection, outside scope.

THE WITNESS: There is not sufficient structure in the specification to perform that function.

MS. WEISKOPF: Those are my questions. I can pass the witness, but I would like to review and sign.

MR. LESKO: I don't have any further questions. But one thing I wanted to say, I guess on the record though is given the timing of this, we have a briefing on Thursday. I'm going to have to write our brief using the rough transcript, I think. So I guess I would ask if there's -- normally you would review a final transcript and sign, as you're suggesting. I guess I would ask if there's certain corrections

that stand out or that are important or that we need to debate before our brief is submitted, if you could try to raise those with us so that we're just making this as efficient as possible.

Does that make sense? So in other words, if you see something in the rough transcript when you get it that we need to discuss and consider correcting as you would, let's try to talk about before the brief is submitted or nearly about to be submitted. Can we do that?

MS. WEISKOPF: Yeah. We'll make every effort to accommodate that request. I think I need to talk to the court reporter about when we can get the rough and everything because you're right, the timing is tight. So I think we're also having a similar issue, but I will try to accommodate that.

MR. LESKO: Okay. And the rough, just so you know, we can go off the record if you want. I don't know if there's anything else to address on the record. I was just going to say, I think they told me an estimate on the rough, I could look it up if you'd like.

COURT REPORTER: Yeah. Let's go ahead

and finish up and go off the record.

MR. LESKO: Oh, it's supposed to be next day rough. So, yeah. Go ahead. Sorry.

COURT REPORTER: Okay. And so, Ms. Weiskopf, you are planning to purchase a rough and a final?

MS. WEISKOPF: I believe we're going to need to do that given the timing.

COURT REPORTER: All right. And then I just have a short little read off. This concludes the deposition of Dr. Andrew Wolfe, taken in the matter of Cutting Edge Vision vs. T-Mobile. Today's date is Friday, March 14th, 2025. And the time is now about 2:30 p.m. Pacific. We are off the record.

(Whereupon, the above-entitled matter went off the record at 2:30 p.m., signature having NOT been waived.)

A

a.m 4:2,11 6:3,4,6 56:19 56:20,22
ability 8:10 125:9
able 17:9,13 51:24 56:8 64:3 66:4 92:20 117:2 131:7
above-entitled 6:2 56:18 122:19 154:18 161:16
above-referred 15:8 31:19 38:5 57:8,16 70:8,19 77:14 84:4 92:16 103:19 106:1 110:22 117:4 123:16
abroad 66:10
absent 136:15
abstract 137:1
abstractly 62:23
access 5:20 50:6,7,12 50:16 117:2 141:22 157:3 158:19
accommodate 160:13 160:18
accomplish 110:7,8
account 83:24
accurate 23:7 30:7 47:12 81:18 112:2,13 113:4 118:19 152:25
accurately 8:10 69:11
acknowledge 17:3
action 42:23 79:1,2
actions 82:18 104:21 105:6
acts 79:21 87:23
actual 33:4 50:11 93:23 93:23 95:24 97:9 138:18
add 130:12
added 87:18 88:25 157:22
addition 23:3 74:16 79:14,16 87:14,18 112:23
additional 21:19 22:17 51:12 52:23 73:17 100:18 102:17 126:18
address 8:14,15,17,18 13:11,18 48:18 49:23 50:1,21 51:6 160:22
addressing 49:25
admit 13:4
advantage 108:12
affect 83:17
afield 68:16
agent 68:24 69:1
ago 68:11 111:5
agree 6:13 7:7,11 12:9 12:14,24 19:25 29:5 45:22 50:18 68:5 75:12 86:13 87:5 88:8 88:12,14 91:24 93:17 94:11 97:12 98:2 101:9 104:7,23 111:20 114:6 116:20 117:19 118:4 121:18 121:23 124:9 128:18 129:8 132:1 138:18 139:16,17 140:18 144:4,15 149:15,17 150:3,5
agreement 127:11
ahead 139:13 160:25 161:3
Albright's 152:19 153:2
algorithm 93:15,21 94:3,12,18,21 95:5,7 95:10,18,19,23,24 96:3,4 97:11 98:19 99:5,17,18,18 100:1,9 100:25 101:3,22 102:6,17,21 103:6,9 105:12 107:8,14,20 107:22 108:3,16,18 108:20 109:5,6,18,19 109:21 110:1,1,10 113:5 114:11,14,19 114:25 115:1,4,5,8,22 116:2,9,13,17,18,19 120:20,23 121:2,5,8,9 121:13 126:7 133:5,8 136:16 138:9,24 140:22 144:7 145:20 146:14 149:8 151:14 151:17 156:10 158:2
algorithmic 145:3
algorithms 101:15 112:21,25 113:13,20 113:22 114:2,4,7,18 115:10,16 116:15 120:13,17,18 121:15 121:17,21,24 122:3,5 150:13
allowed 76:10 128:15 129:5 130:22 155:19 157:1
allows 124:5
Alright 156:19
alternative 100:23
ambiguous 146:5 150:7
amended 10:4 35:4 78:3 85:13 118:14,18
Amendment 3:10
amendments 30:18 78:11 79:25 88:2
America 16:4
amount 27:16 28:22
analysis 13:1 14:18 80:21 94:25 132:19
and/or 119:8
Andrew 1:16 3:3 4:4 5:9 8:15 70:25 161:11
answer 7:24 8:5 14:1 18:7 22:13 24:2 26:1 27:23 41:6,7,14,16 61:15 108:24 109:8 110:11 133:22 136:12
answered 21:1,3,8 23:25 30:11 37:20 41:25 44:4 50:24 89:17 90:1 130:19
answering 7:18 40:1
answers 14:3
anybody 7:10 19:18,18
apologies 70:16
apologize 55:22
appear 46:23 50:7,10 50:25 72:20,24 127:5
APPEARANCES 2:1
appears 15:17 38:20 57:11 76:5,8 78:21 84:16 87:6 93:14 111:4
Apple 114:1
applicant 30:16 79:16 79:19,22,23 81:5,13 81:23 82:12,24 87:17 87:18,21,24,25 88:9 88:14,15 141:7
application 67:18 69:3 69:10 77:25 82:19 85:12 88:25 117:15 118:5
applications 10:17 68:11,13 69:22 70:1
applied 60:4 80:10
applies 67:11 120:9
apply 81:2
applying 59:17 83:25
appreciate 153:20
approaches 61:14
appropriate 79:25 88:2 114:25 115:1
appropriately 81:9
approve 69:10
approved 20:20
Approximately 66:13
area 111:24
argument 144:1
arguments 55:14
arithmetic 61:12
Arizona 1:6
art 26:15 27:4,7,10,11 31:13 32:15 59:12 64:18 67:6,10 113:18 114:15 116:3 119:12 120:5,7,9,12
artisan 63:22,24 64:8 65:6 96:6 105:15 126:13,14 150:21
aside 6:17 19:4 35:17 43:13 56:1 105:4 134:3
asked 20:25 21:7 22:3 22:17 23:25 26:2 27:15 30:10 37:19 44:3 46:13,19 49:6,23 50:2,24 89:16,25 135:18 153:11,12
asking 76:14 90:16 107:16 109:20 130:21
assembly 124:24
asserted 10:24 128:13 154:25
assertion 92:6
assignee 68:22
assist 12:20 28:3,19 29:13 34:5
associated 67:16
assume 7:25 54:23 140:25
attached 25:15
attempting 150:14
attorney 66:22 68:24 69:1,19 70:4 74:25
attorneys 20:18,20 68:19
automatic 141:10
automatically 140:4 142:24 143:15 144:10 155:14,15 158:9
available 30:1 95:3 98:11,13 105:13 115:8,22 116:15 122:3
Avenue 2:5,11
avoided 23:22
aware 16:8,20 21:17 43:6,8,25 44:5 46:5 47:23 53:4,6,15,19,22 58:20 66:18,21 67:10 71:20 74:5 80:14 92:7 92:8 134:8,16 149:24

B

B 2:4 39:21
back 6:5 31:2 33:18 37:1 38:16 41:8,11 47:15 48:14 56:21 78:10 84:24 87:8 118:8 122:22 123:14 132:12 133:17 134:22

152:3 154:21
background 7:3 112:7 117:22 119:2 121:16
backing 106:22 107:1,7 107:19 108:8 109:11
ballpark 11:14
base 54:23,24
based 12:14,16 15:17 20:16 58:14 71:15,19 72:21,23 88:4 91:12 97:1 98:24 112:1,15 113:15 121:15 124:5 137:14 140:6 142:18 143:17 144:11 155:19
basic 61:5 115:21
basing 145:7
basis 12:8 17:3
Bates 40:12
bathroom 56:13
bear 103:16
bears 15:16
beginning 31:8 112:20
begins 4:4 25:17 74:14
behalf 1:19 2:2,9 4:15 4:18,21 8:22 12:2
believe 10:7 11:23 16:18 19:17 21:9 26:22 27:5 33:14 34:10 37:8 41:25 55:3 66:15 68:22 80:9 91:21 112:11,12 120:4 124:25 130:15 138:7 150:19 157:20 161:7
believed 16:11 43:18 80:16 81:16 89:7
believes 79:23 87:17,25
Bernardi 149:1
best 7:19 14:2,14,15 16:4 17:17,20 23:11 32:21
better 99:24
beyond 23:14
big 63:14,16 65:17
bit 56:24 64:13 96:18 147:6 153:24
block 73:6,9,14,21,24 74:2,6 98:14 125:20 126:6,10,11
blocks 124:5
board 152:6
body 138:14 139:9
bottom 87:15 106:17
Boulevard 8:19
boundary 65:13,13
box 6:22,23 15:4 31:17 57:1 65:17,19 66:5 70:15 71:19 73:18,20 152:13
boxes 73:4,10,13
break 8:3,6 45:3 56:9 122:9,12 123:2,7 153:25,25
brief 54:11,13 159:21 160:2,9
briefing 55:14 159:20
briefly 10:21
bring 66:4 152:2
broader 83:10
broadest 83:3,9,19,21
browser 6:22,23
build 62:22 145:17 146:3
building 98:14 126:6,10
bulk 20:4
bullet 23:1 125:14,15
business 108:1
button 115:6,11,12,12 115:14

C

cache 106:22
calculate 64:25
California 8:20
call 60:19 102:24 109:4
called 1:17 5:10 66:18 97:13,17
camera 158:17
cameras 118:3,13,17
candor 66:19 67:18
capability 132:3,7
capable 136:16
captioned 54:2 55:16
captured 140:9 142:1 143:20 144:14
care 79:17 87:19
careful 37:4 68:17,20
carefully 18:1 30:2,14 34:12 35:23 51:5 78:23 89:1
carried 140:17 144:3
carrier 132:12 133:17 133:17
case 1:9 4:7 9:8,15 14:8 17:3,3 22:15 26:25 28:12 37:14 38:14 41:2,19,23 54:1,17,21 81:13,21 92:3 93:1 100:6,22,24 122:2 134:23
cases 18:17 25:21 32:10,18 33:10 62:5 81:20
categories 151:6
cell 127:8,22 131:8,12 132:6 133:9,16
cellular 50:5,6,12,16 126:23,24 127:22 131:24 132:2 134:4,5 134:9,19 140:8 141:20,22,24 143:19 144:13 155:20 157:3 157:4,21 158:1,19,20
center 72:25
certain 13:17 14:8,24 18:23 19:1 29:16 30:22 33:11 37:15 90:8,24 106:23 107:13 113:8 134:12 145:22 151:1 155:14 159:25
certainly 7:9 14:2 15:3 18:12 22:14 44:24 47:8 49:17 59:5 72:11 74:5 109:17 114:4 124:24 156:2
CEV 9:4 10:23 14:6 24:14,19 25:2 36:19 40:24 54:1 55:15 81:13 82:24
CEV-T-Mobile 3:9
CEV-TCL 3:7
challenge 116:24
change 16:23 66:9 82:2 119:6 128:24 151:16
changed 75:2 127:19
changes 17:6
characteristic 108:4
characteristics 62:17 63:6
characterization 53:20
characterize 36:4
charges 128:17 129:8 130:25
chat 123:8
chats 7:6
check 99:8,11,13 100:21 147:17
Chicago 2:6
chip 60:23 149:6 152:6 152:8,8,10
choose 114:25 115:11 115:19
choosing 116:25
chose 43:12,23,25 46:15
circle 31:2
circuit 151:20,23 152:2 152:6
circuitry 112:24
circular 116:17
circumstances 68:25 109:1
citations 56:5
cited 23:4,17 31:8 32:1 32:2,21 33:2,15 52:20 55:3,8 78:18 90:15 129:11
claim 3:7 8:21 10:5 27:3 35:5,17,19,24 36:1,13 36:18 40:23 46:21,22 46:23 47:4,10 49:12 50:7,8,17 54:11,13 55:13 74:17,18 79:24 80:21 81:2,7 83:25 88:1,19 89:7,14 91:23 109:20 136:10,13 137:3,12,23,23 138:2 138:5,8,16,24 139:2,7 140:16,17,23 141:4 142:8,13,17,19,20 143:5,6,13,15,22 145:10 151:12,13 155:8,12,23 156:8,17 156:20 157:12 158:4 158:5,7,15,21,25 159:3,6
claimed 51:1 82:7 135:24 136:12,17 137:8,9,18 138:11,14 149:7,9 150:7,12,14 151:3
claiming 137:5
claims 28:11 36:6 50:9 76:15 78:2,4,12 79:17 79:20 80:11,12,20,25 81:18 82:3,14,25 85:13 86:1,1,2,3,9,13 86:16,17,21 87:3,4,19 87:22 88:7,10,16 89:1 90:10,23,25 91:10,15 92:10 94:22 95:22 101:2 107:16 109:21 128:5 135:18,21 136:3 139:4,16 148:16 153:10,15 155:1 156:1,2,3,4 157:15
Clara 8:20
clarification 69:24
clarify 13:6 51:18 61:25 117:18
class 62:20,21,23 63:14 63:15,16,19
clearly 23:17 47:23 66:1 88:25 111:18
close 70:15 126:20
closed 109:11
code 93:18,19,22,23 94:9 95:2,4 96:10 98:25 99:6,23,24,25 100:7 101:9,14 103:1

104:20,22 105:5 124:5 125:19,20 126:10,11 138:18 144:18 146:8
coder 97:3
coders 98:11
coding 96:19,21,24 97:2 98:1 105:1,1
colleagues 7:6
collectively 9:3
Column 74:10 106:15 106:18,18,19 107:5 117:21 119:1 139:20 146:20,23
Columns 106:16,17
combinations 103:13
come 22:15 133:21
comes 152:12
coming 123:19
comment 46:8 48:7 49:19 51:18 52:4 53:8 80:8,16 81:25 83:1 88:21
commented 48:13,25
commenting 52:24
comments 81:5,5,10,13 83:22 90:21
commercially 127:6
common 58:11 59:5 61:3 63:11 73:12 96:5 97:16 127:19
commonality 63:20
commonly 60:20
communicate 65:1 123:10
communicated 133:25
communicating 132:12
communication 127:15 127:17
communications 7:9 7:12 18:8 19:8 20:14 22:10,11
Company 1:7 4:10
compare 78:22
comparing 84:19
complete 14:3 23:7 37:23 68:9 90:22 99:3
completed 146:17
completely 138:14
complicated 13:22 14:1 102:22,23 157:25
component 58:13
components 63:9,10 63:10
compound 31:11
comprehensive 49:9
comprising 141:4 142:8,19 145:8,9
compute 60:20
computer 6:17,25 58:13 119:8 122:6
computers 61:21,23
computing 58:12,14 61:23 62:11
concept 97:23,24 98:1 98:4,6 126:25 127:3
concluded 135:22
concludes 161:11
conclusion 82:8 145:7
condition 98:17,18,19 98:24 99:14,15,22,25 100:11,19,20,21,22 101:19,21 124:6 125:7,18,21 126:10 144:8,8,8,9 145:22,25 157:7
condition's 145:23
conditional 97:4,13,17 98:10 103:13 104:3,9 104:22 105:5,16
conditionals 98:5
conditions 97:19,21,22 98:10,16 99:23 103:7 105:10 106:23 113:8 131:21 139:22 140:2 140:13,14,15 141:15 141:17 142:7,10,24 143:2,10,12,14 144:20 146:6 155:14 155:16 158:10,11
conduct 24:7
confident 37:3
configuration 122:1
configured 143:4 155:13 156:25 158:17 158:22
confirm 6:12 15:14 17:15 133:2 134:17 158:17
confusing 85:20
connect 143:16 144:10 155:14 158:9
connected 63:11 134:10 141:24
connecting 128:6 140:5 155:15
connection 141:10
consider 37:9 76:22 80:22 92:4 108:15 109:2 110:6 114:24 135:13 138:7 160:8
consideration 37:16
considered 42:22 57:21 58:1 72:2 77:6 81:8 89:4,10,20 90:11 91:25 107:15 135:15 138:4
consistent 125:22,25
consisting 126:4,9
consists 103:7 125:13 125:17
constitute 30:13
construct 114:25 115:3 144:19 145:4
construction 3:8 8:22 27:3 36:18 40:18,24 49:12 54:11,13 55:14 80:21 83:4,9,19,22,25
Constructions 10:1,5 35:3,5
construe 76:15
construing 82:25
contain 63:8,9
contained 152:6,8
contend 114:1
content 81:10 95:17,25 97:6 105:22 111:6
contentions 24:13,17 24:20 25:1,3,6,11 128:20 129:19
CONTENTS 3:1
context 58:6,11,18 59:3 60:12,17 61:2,8,20 62:4 64:14 71:23 72:2 81:9 102:6 105:19 109:6,7,17 113:2 126:22,23 128:24 129:25 130:15,21 131:2 135:11 136:10 137:3 140:3 145:2 150:25 151:1
contexts 68:21
continue 19:6 86:11
continues 106:19
contrast 49:13
control 124:1,4,7
controller 35:18 51:2 73:1,2 119:7,13 135:16,20 136:5,11 136:15 137:4,13,19 138:4,6,9,10 139:21 140:1,12 141:13 143:9 150:8,17,21,24 151:1,2,12 153:15 155:11,13,18,21 156:4,5,5,20,25 157:6 157:9,10 158:10,16 158:21
controllers 150:2,10
convened 4:7
convenience 9:1
conventions 128:12
cooperation 127:10
coordinate 119:24,24
copied 86:21,23
copies 86:15
copy 69:1
copyright 104:17
correct 8:24 12:3 14:9 14:13,18 16:6,19 17:9 17:13,17,20 25:14,18 25:22 33:6 37:18 38:25 39:11 40:5,15 40:16 43:1 46:10,12 48:9 54:14,15 55:2,10 66:11 69:18,19 93:3 139:4
corrected 17:8
correcting 160:8
corrections 159:25
correspond 78:17
corresponding 82:20 109:14
corresponds 101:19
counsel 1:17 5:10 22:1 22:11,14 28:9 29:17 54:6 59:19 123:3
counter 61:11
country 127:16
couple 124:25
couples 119:7
course 66:16 83:2 108:11
court 1:1 4:3,9 5:1,3,6 5:25 6:5 12:9,16,21 13:23 27:6 41:10 49:13 56:16,21 83:11 122:17,22 154:16,21 160:14,25 161:4,9
court's 13:1
covered 80:25 82:3
CPU 60:19 62:11 119:8 119:10,15,17,20 120:2,8 121:3 122:7
create 82:4
created 114:19
criteria 133:6,15
critique 49:9
CROSS 3:2 154:23
Cruz 8:19
Ctrl-F 30:22
current 76:21 77:4 148:14
currently 6:16
cursory 15:17
customary 83:12
cut 118:23
Cutting 1:6 4:5,16,18 55:25 56:2 161:12
CV 25:17,20 34:13,14 66:8 111:17,24

D

data 12:14,17 42:21 106:21,24,25 107:2,6 107:6,8,18,18,21,22 108:8,9,18 109:8,10 109:12 113:9,13,14 113:15 118:1,15 119:10 121:23 122:6 126:21 128:16 129:7 130:24 135:8,13,17 141:19 155:20 157:4 158:20
date 4:10 78:15 84:21 85:2 94:6,15 104:14 105:4 118:5 128:13 129:4 130:25 161:13
dated 10:1,5 33:21 35:3 35:5 38:18 94:10
day 78:2 85:14 161:3
De 8:19
deal 64:2 65:3
dealing 60:1 67:19
debate 35:18 160:2
decade 106:13
decades 125:1
December 33:21 38:18 42:3 111:12
decide 76:15 80:24
decided 34:12 48:4,7
decision 22:6 112:21 112:25
decisions 104:21 105:7 113:15 124:7
declaration 3:5,7,13 8:22 9:7,11,12 10:9 10:13,20 11:11,13 14:13 15:15 16:2,12 16:15,19,22 17:22,25 18:5 19:16,23 20:10 21:12,14 23:9,15,18 23:23 24:7,9,12,22 25:4,10,15,25 26:6,9 27:20 28:17 29:2,4 30:25 33:21 34:3,9,18 34:22 37:2,7 38:16,17 38:23 39:10,10,16 40:21 41:1,5,21 42:5 42:10,14,19 43:5,7,20 44:7,9,13,16,18,23,25 45:24 46:4,9,10 47:5 47:20,21 48:8,14,15 49:1,6,11 50:22 51:7 51:13,15,19 52:1,2,5 52:9,11,13,17,21,22 52:25 53:3,8,18 55:9 55:20,25 56:3,7 57:7 57:23 59:16,22 75:10 78:19 79:4,7,9 80:7 81:12 82:1 85:22 86:21,24 87:12 88:4 91:7 111:5,11 126:14 128:2 135:3,4,8,14 148:5,10,23 149:11 150:3,16
declarations 26:3
deep 111:18
deeper 132:9
Defendant's 10:4 35:4 40:17,19 54:10,13
Defendants 1:11 2:9 4:22 9:2
define 27:6 109:5,15 133:14
defined 67:22 110:2 126:14 133:6
definitely 111:6
definition 105:15
definitions 71:19 150:17,20 151:4,16
depend 58:10 60:17 61:8 64:22 72:9 109:6 114:20 131:18,18,20 145:2
dependent 127:18
depending 59:3 64:13 68:25 100:19 115:10 115:17 121:25 126:22
depends 58:6,18 60:12 61:2,19 62:4,21 63:16 71:23 97:15 98:15 100:8 101:8 104:25 105:8 146:13 147:5 151:10
deposition 1:15,18 4:4 4:25 5:17 6:9,12 7:5 8:4 9:2,7,10,14,18,25 10:3,13,15 11:6,10,12 11:25 16:15,23 38:2 42:2 161:11
describe 58:9,12 73:18 93:10 96:6 98:20 113:7 127:3 145:20 145:21,23 151:19 157:24
described 72:16 74:2,7 93:22 96:9 113:19 121:10 126:6 138:3,5 139:7 141:11 144:22 145:5 158:25
describes 99:16 103:9 120:19 138:8 140:14
describing 65:22 73:20 108:2,4
description 72:10 99:4 99:19 101:16 108:14 113:6 114:18 121:8 121:12 144:6 151:25 152:15 155:25 157:21
descriptions 151:8
descriptive 119:22
design 58:25
designated 142:3
detail 64:2,5,12,13,24 65:3,24 67:4,7 107:11 113:20 138:11
detailed 42:24 94:25 96:20,23 97:1 113:6
detect 156:25 157:7 158:11
detected 139:21 140:1 140:11 141:12 143:8
detection 112:25
detector 63:5
determination 83:18 132:11,13,15
determine 13:23 17:5 32:20 72:2 94:20 116:7 131:8,12 132:3 141:19,23 153:12 155:18
determined 14:21,25 141:12,25 157:4 158:19
determines 132:24 133:18
determining 125:7
developed 20:17 113:12
development 58:25 105:8
device 35:19 45:18,22 46:4,22,24 47:3,13 62:11 151:21 152:7 152:15,16
devices 62:20,22 118:2 118:2,16,17
diagram 73:6,9,14 74:2 74:3,7,8
diagrams 73:21,24
dictionary 150:16,19
die 115:13
differ 63:5 120:17
difference 60:10,15 83:6 95:4 144:23
differences 94:7
different 27:1 36:6 53:6 58:14 61:10,14 62:14 62:16,25 80:12 83:25 90:2 101:15 103:11 103:13 104:21,21 105:6,6 114:8 116:15 118:11 121:19 124:17 125:4,5 127:4 146:10 153:9,9,10,10
differential 127:13
differentiate 61:21
differs 85:21
direct 3:2 5:13 139:21
directly 133:13
disagree 49:8 88:13 144:19 149:15 150:4 150:8
disagreed 48:25
disagrees 81:24
disclose 67:4,9,20 94:3 151:14,16,17,18
disclosed 14:22 39:20 56:5 93:16 137:17,22 149:20 156:8
discloses 94:11,21
disclosure 66:19 68:23 69:2,7 75:1 82:5 94:18,20 107:14 109:13
disclosures 82:6
discovered 16:21
discuss 59:15 160:8
discussed 11:7 20:17 29:16 50:19 55:19 57:6,24 86:22,24 120:14 121:16
discussing 6:11 53:2 57:6 120:1 127:22 154:25 156:16
discussion 20:8 35:20 47:3,4 92:9 130:18
discussions 18:16 47:9 69:6
display 111:19,23 142:3
displayed 114:12 115:6
displays 111:23
disputed 35:17 36:13
DISTRICT 1:1,1
DIVISION 1:2
docket 38:21
document 6:11 15:9,21 22:2,4 31:20 34:1,6 38:6,10,11,24 40:20 44:25 53:11 56:1 57:3 57:9,14,17 70:9,20 71:10 77:13,15 84:5 84:15 85:1,17 92:17 92:23 93:5 103:20 104:15 106:2 110:18 110:23 111:3 117:5 117:12 123:17,20 126:20 128:21 147:19
documents 5:19,21 6:10,17,20 22:5,18 23:4,14,17 24:12 28:4 28:6 32:9 33:4,5,10

33:14 35:2,10 36:19 37:10 39:15,20 40:2 40:24 42:13,17 44:6 44:15 55:15 56:2,6 77:18
doing 49:9 132:9,19 149:18
dominated 62:10
download 15:6 38:1 110:25 128:17 129:7 130:24
downloading 106:7
Dr 1:16 4:4,23 5:2,6,14 6:7 9:11 18:8 19:8 20:15 21:16 22:11,21 26:2 31:18 33:21 34:9 34:17 37:25 38:13,18 38:24 39:9 41:9,15,21 42:3,20 43:4 45:4,15 47:20 48:24 49:8,10 49:14 51:7 52:2,5,20 54:23,25 55:1,3,7,9 55:19,24 56:24 57:12 58:2 74:10 77:10 84:2 92:20 103:16 104:23 105:24 107:4 110:20 122:10,24 128:1 135:2 139:11 146:21 148:5,9,22 150:15 152:24 153:20 154:24 161:11
draft 18:4,18,21 20:24 21:13 79:20 87:22
drafted 19:3,12,17 20:12,19,19 21:5
drafting 21:11 39:16
draw 65:17,18 113:17
driver 119:8,10
driver/CPU 121:23
duly 5:11
duty 66:19 67:18,20,24

E

earlier 53:2 54:12
early 150:24
easier 15:7 36:8 55:21 78:14 87:8
easy 145:11
Edge 1:6 4:5,16,18 55:25 56:2 161:12
effectively 126:19
efficient 160:4
effort 160:13
eight 11:15 100:17 102:7,18,19 103:10
either 9:19 14:25 28:23 40:25 44:9 45:4,5 56:5 88:21 100:12 105:25 118:13 123:9 125:19 128:9 149:4 151:7 154:5 156:6
electronic 60:2,6 62:22 118:1,16
electronics 62:20 66:2 66:5
element 88:19 91:23 109:20 140:16 143:2 144:3
elements 31:13 50:8 60:25 61:5,23 77:5 82:9,10 90:24 135:16
Elizabeth 2:10 4:20
Elizabeth.Weiskopf... 2:13
emulated 59:2 72:1
enable 94:23 143:17 144:11
enables 67:5
enabling 140:6
encrypt 108:22,24
encrypted 106:23,24,25 107:2,6,7,9,18,19,21 107:23 108:8,9,19 109:8,10,12
ends 78:7 120:2,8
engine 60:20
engineer 59:25 108:2
English 145:1 146:5
ensure 69:11
entire 29:25 31:5 32:19 35:10 102:6 109:20 110:2 129:17
entirety 99:4,18 100:9
environment 105:9
equal 100:11,16
equals 95:12,12 99:12 99:13,22,22 100:6,6 101:17,18 102:11,11 108:8 109:10
equivalent 65:16 125:6 147:14
Eric 4:8 122:16
error 17:5,8
errors 69:16,19 70:3
ESQ 2:3,4,10
establish 96:17
estimate 19:15 160:23
evaluate 94:19 102:5 131:22
evaluated 113:10
evaluates 125:19
evaluating 103:7
evaluation 102:16
evaluations 103:8,14
eventually 91:15
everybody 56:9
evidence 12:21 13:9,11 13:17 19:17,20 20:3,4 37:15,17 46:17 75:9 81:17
exact 83:14
exactly 11:14 18:15 40:1 41:3,19 75:6 84:18 110:9
examination 1:17 5:13 154:23
examined 5:12 89:1
examiner 30:17 32:10 32:17,21 66:22 79:23 80:24 81:6,23 82:15 82:17,24 83:23 87:25 88:19,22,23 89:4,7,10 89:13,19 90:8,23 91:3 91:9,15,25 92:6
examiner's 80:19 91:20 92:11
examining 91:25
example 19:22 21:18 21:25 24:14 32:14,22 54:6 65:10 81:12 93:18 99:8 100:5,14 100:15 106:24 108:6 113:16 114:12 124:15 124:23
examples 106:21
exceptions 59:3
excerpt 78:6 85:3 107:21
excerpts 10:8 20:1 79:1 79:3
execute 124:5
executed 125:20
execution 124:8
exemplary 93:15,22,24
exercise 39:19
exhibit 3:4 15:5,9,12,14 17:23 22:19 25:25 26:12 31:16,20 33:18 35:7 36:9 38:1,6,19 38:23 39:3,23 41:1 42:12,25 44:10 45:10 45:20 46:1,6 47:16 48:9 50:5,20 51:8 52:10 53:9,11,17,21 54:2,9 55:9,17,24 56:25 57:9,13,15,17 57:20 70:7,9,13,14,15 70:16,20 71:3,7 75:15 75:16 76:2 77:10,15 77:23 78:11,19 80:8 84:3,5,7,14,21,25 85:5,10,11 86:7,19 87:9,11,16 88:5 91:6 91:6 92:14,15,17 99:9 99:10,10 101:18 103:16,17,20 104:4 105:23 106:2,11 110:18,19,20,23 117:2,5,18 119:1 120:2,8,15 121:11 122:25 123:15,17 126:15 135:3 139:10 139:15 148:5 149:12 149:12 155:5 156:13
exhibits 77:8 122:25 150:8,12,14
exist 98:1 114:7,15 121:17,24 126:4 132:14,21 133:24,24
existed 43:6,8 98:5 114:5 116:2,24 121:21 122:4 126:5 126:10 132:2,7,17,19 132:22 134:13,15,18
existence 98:14,18 158:1
existing 115:5,7,9 116:9 121:17 134:16
exists 133:23
expect 134:23 152:4
expectations 65:22
expected 67:3
experience 26:14 73:22 111:25 112:16
expert 3:5 12:20 25:21 25:24 26:5,9,18 28:4 29:15 33:20 37:9 38:17 54:20 80:7
expertise 27:1 111:25
experts 12:13
explain 44:17,24 51:25 69:7
explained 18:17 21:10 59:18 60:3 66:23
explaining 141:7
explanation 52:8 77:3
explanations 69:14
explicitly 147:21
expound 69:6
express 42:23 51:14,25 52:6,21,25 93:20 95:24 97:11 101:14
expressed 98:8
expresses 76:12,23 96:15
expressing 97:8
expression 125:18
extent 76:11

F

f 44:16 50:8,8
f(ii) 140:17 143:3

F2 158:5
face 76:5,6
fact 53:3,16 68:8 82:4 120:19 153:8
factor 76:22
factors 63:6 77:3,6 82:8 114:24
facts 12:14,16,25 13:4 13:7 153:4
factual 134:21
factually 134:25
fair 53:20 64:19 80:17 102:24
faith 66:19 67:18
fall 79:18 87:20 146:7
falls 79:24 88:1
false 100:12 101:7,25 102:5,13,16 103:3,9 124:6 125:7,19 142:10 145:24
falses 103:2
familiar 12:11 58:2 104:1 126:15 127:2 131:23 145:16
family 90:22 150:2,10
far 16:20 68:16 69:13 128:1,21 129:10
feature 148:16,18
February 10:5 35:5
feedback 30:16
feel 34:16 37:13 52:3,4
fees 30:3 50:6,7,13,16 141:22 157:3 158:19
felt 37:16,21,21 49:20 51:4,17
field 112:16
figure 65:2 71:9,13 72:23 73:4 93:11 108:13 114:5 120:19 120:24,25
Figured 45:8
Figures 93:6
file 3:9 9:19 10:16 11:3 20:1 26:4 29:2,3,8,11 29:14,18,21,25 30:7 30:21 32:11,14 40:10 70:1 77:18 82:16,22 84:16 85:3 88:18 89:4 89:6,13,19,23 90:3,17 91:14 92:11 141:7 147:7
filed 67:1 78:1 85:12 86:10,12,16,17 94:16 117:16
filing 67:9,17 68:6 69:11,20 86:6,8 87:3 87:7 88:6 118:5
final 87:12 159:23
161:6
finalizing 39:10
financial 127:11
find 30:22 52:23 64:7,8
fine 6:14 7:15 8:18 45:4 45:5 105:25 154:2,5
finish 7:17 29:23 31:5 34:9 35:10 161:1
firm 29:14
first 5:11,17,20 6:8 11:22 18:18,20 19:4 19:13 20:24 29:20 84:14 94:14 96:17 101:7 102:10 117:23 123:25 136:22
five 23:2,4 56:12 111:5 153:25 154:2,5,8
flag 82:17
flagged 88:19 89:14
flow 124:7
flowchart 108:12
flowcharts 107:12 146:3
focus 20:5,8 36:20 97:24 107:5,17
focused 49:24
folder 5:19,20 6:10,18 6:21,24 15:4 31:17 38:2 57:1 70:7 84:8,9 92:15 110:20 117:1 122:25
following 23:3 85:14 139:22 140:2,12 143:9
follows 5:12 42:24 78:3
footnote 85:15,15,16 85:25 86:4
foregoing 16:5
form 16:25 17:10 26:20 30:10 32:6 34:19 35:21 36:23 37:11,19 43:15,19 44:11,21 47:6 49:3,21 50:23 51:9,21 52:18 62:12 64:10,21 67:13 68:15 73:15 74:4,22 75:17 76:25 78:20 81:6 86:14 92:2 95:23 96:8 106:23,25 107:7,19 107:24 108:8 109:10 109:23 110:5,14 116:4,22 119:17 124:11 127:17 131:15 132:5 134:20 136:25 137:12 140:19,22 144:16 146:9 147:22 147:25 152:9,12
formal 139:1
format 36:16 73:12 95:10,14,15 96:3 119:19 122:5 126:16
formatted 97:10
formed 54:22
forming 14:7 21:11 42:22 149:3
forward 108:13
found 128:4
foundation 96:18 131:16
four 103:11 106:15 143:12,14 144:2 158:9
Fourth 2:11
fragment 108:3
frankly 87:7 152:20
freedom 37:22
Friday 1:13 4:10 161:13
front 38:3 49:18 70:23
full 8:13 14:3 37:16
fully 8:10
function 76:16 77:5 82:18,25 83:17 88:20 92:6,10 98:21 99:6 109:3,16,22 137:23 137:24 138:21 140:4 140:10 151:12,13,15 155:16,21,24 156:1 156:11 157:9,10,13 157:15,18,24,25 158:22,24 159:1,4,9 159:13
functional 140:13 144:6 151:8 153:17
functionality 60:22 99:19 151:9
functions 51:1 82:7 93:16 135:24 136:17 137:8,18 138:12,12 138:13 139:6,8 149:7 149:9 150:11 151:7 154:25 155:11,18 156:19 158:6,8,12
fundamental 124:1,3
further 50:17 159:17

G

Garlick 41:21 42:3 54:23 55:7
Garlick's 54:25 55:2
Gates 2:10 4:21
GeeksforGeeks 3:15
general 58:13 62:13 67:2 68:2 69:21 76:9 88:23 97:23,24,25 98:4,6 101:12 113:5 120:10 127:24 128:5 148:12 151:5,19
generally 67:23,25 73:8 75:24 81:4 83:10 96:11 101:6 104:7 119:15
gestures 113:1
getting 22:9 68:16 105:24
give 12:4 14:2 17:20 41:10 64:2 65:8 66:3 68:1 76:4,9 77:8 83:8 90:7 117:8 144:13 154:1
given 12:8 37:22 53:21 77:4 159:19 161:8
giving 12:7 68:4 71:18
go 5:16,23 29:1 33:13 38:16 39:18 47:15 48:14 52:12 64:1,3 68:20 77:23 78:10 84:20,24 87:8,8 91:5 102:18,19,20 109:11 112:4 118:8 122:15 135:10 139:13 146:19 152:1 160:20,25 161:1,3
goes 85:4 112:5
going 4:24 5:14 6:7 7:12 19:6 20:13 26:11 26:24 41:12 45:2,4,8 66:8 68:1 70:13 71:18 122:9 127:25 128:19 134:22 146:19 153:23 159:20 160:22 161:7
gonna 70:6
good 4:14 56:16 66:19 67:18 154:13
great 4:23 22:24 64:2 65:3 92:22 96:24 106:8 114:2
Gross 4:9
ground 4:24 5:15 6:8
group 28:5 65:7 140:8 142:5 143:19 144:14
grouping 63:17
guess 6:21 20:9 93:21 95:2 116:9 159:19,22 159:25
guidance 28:8,12 66:4
guide 22:7
guides 102:16

H

h 40:23
hand 5:7
handheld 118:2,16
handled 18:21
handling 120:13

Hang 70:12
happen 22:3 58:24 98:24 141:11 144:2 145:22,23,24,25 146:15
happens 98:16 100:13 101:8 143:13
hard 7:13
hardware 136:19,19,23 137:5,6 156:7 158:3
heading 45:17,21 117:22
hear 24:6 27:23
heard 5:16 126:21,24
hearing 54:4,5,7
Hello 4:17
help 27:18 39:21 82:8 105:21
helpful 14:5 49:13 101:5
helps 28:5 91:13
high 73:21,24 101:16
histories 9:19 20:1 29:3 29:8,11,14,18,21 30:7 30:22
history 3:9 10:16 11:3 26:4 29:2 30:1 32:11 32:14 40:4,5,7,10,13 40:15 77:19 78:5 80:3 82:16,23 84:17 85:3 88:18 89:4,7,13,19,23 90:3,17,22 91:14 92:11 141:7 147:8
home 8:17 128:15 129:6 130:23
honest 12:8 68:7,8
host 122:6
hosting 140:5,7 142:6 143:16,18 144:10,12
hour 45:2
hours 11:15,22
housekeeping 56:24
HOV 95:12 99:14
huge 65:14
Hughes 3:7 9:11 26:3 33:21 34:9,17 38:13 38:18,24 42:21 48:24 49:9,14 55:3,24 148:5 148:10 150:3
Hughes's 39:9 43:4 47:20 49:10 51:7 52:2 52:5,20 55:9,19 135:2 148:22 150:15 152:24
hundred 33:14
hundreds 62:14
hungry 105:25
hypothetically 94:9 133:4 146:15

I

i.e 132:15
ID 133:16,20 134:10,19
idea 21:4
identification 15:10 31:21 38:7 57:10,18 70:10,21 77:16 84:6 92:18 103:21 106:3 110:24 117:6 123:18
ignore 34:24 37:15 46:14,15 48:1,3,4 76:24
ignored 35:19
ii 50:8 144:3
IL 2:6
illness 8:9
image 140:8 143:19
image-sensor 144:14
imagine 108:2
impact 13:1 52:16 127:11 128:9
impair 8:9
implement 94:4,24 135:21
implemented 126:1 133:3
implying 76:19
important 14:18,20 47:10 160:1
impressed 115:24
improve 113:14
improvements 113:25 114:2
include 42:23 61:11 65:14 66:2 73:23 80:11 127:9,12
included 10:8 49:16 52:1 60:21 65:12 76:1 79:7,9 86:15 122:5 147:21
includes 67:19 97:7
including 30:18 118:2 118:16 150:1
incompatible 127:15
incorporate 65:18,19
incorporated 147:1,4 147:20,24,25 148:2 148:15,18 149:25
incorporates 147:19
incorporation 148:11
incorrect 16:22 17:4
increased 50:16 141:22 157:3 158:18
indefinite 47:13
independent 24:8
independently 54:22
indicated 11:3
indicating 132:7
indication 39:14 89:3,6 89:9,19 107:2
individual 67:16,21
influenced 52:10
inform 79:23 87:25 119:15
information 37:10 42:21 67:20 116:12 119:9 121:22 126:18 135:25
informed 12:8 22:14
infringement 24:13,17 24:20
initial 102:13
initially 61:20
innovations 112:23
input 72:4,5,11,13
input/output 60:22
inputting 118:1,15
instance 88:18 89:13 99:8
instances 18:20 81:11 82:23
instructed 48:1,3 76:20 137:15
instruction 75:9
insufficient 136:5
integrated 60:23,25
intended 74:17,19 93:20 145:12
intent 76:12,21,24 77:5 80:11 82:13
intentionally 23:22
interaction 69:21
interchangeable 63:1
interesting 83:16
interface 140:8 141:20 141:25 143:19 144:13 155:20 157:5,21 158:1,20
internet 140:6,7 141:24 143:17,18 144:11,13
interpret 119:17 141:2 141:5,6
interpretation 148:19
interviews 30:19
intrinsic 30:13 75:9,14 75:21,23 76:7 81:6,17
introduce 4:12
introduced 61:20 112:24
introduction 20:7 114:3
invalidity 25:1,3,6,11 128:12 129:18
invented 69:12 95:6
inventing 95:8
invention 67:4,6,8 68:23 69:2,7 75:1
inventions 68:21
inventive 95:20
inventor 66:9,14,23 67:24 68:5 69:17 70:24 71:5 75:4 92:25 93:2 106:14 149:25
inventors 67:11 70:25
investigate 153:6
investigation 132:9
invoke 74:17
involve 30:2 127:14
involved 18:24 32:14 36:4 53:7,22 68:6
involvement 66:17
involving 53:4 54:7
iPad 114:3
iPhone 114:3
IPR2020-00234 3:13
irrelevant 30:9 44:12 62:7
issue 8:8,9 9:14 13:5 26:21 28:11 53:13,13 74:23 75:19 83:2 89:10 92:4 107:18 148:1,3 160:17
issued 10:21 86:1,3,9 87:4 88:7,11 91:16 94:17 95:8 117:16,19
issues 13:14 26:23,25 49:12,15,24,25 50:1 84:11 89:5 91:25 135:19
item 29:1 33:20 48:20 48:23 54:14,16 58:17 58:19 62:1 63:23 71:12,16 72:5,18,19 72:19,25 74:1,6,7 99:11 100:3 114:20 114:21 117:3 136:23
items 23:2,5 65:8 72:21 73:3,9,13

J

J 2:3,10
January 10:1 35:3
JavaScript 3:12 104:1 104:12
job 88:22
Judge 152:19 153:2
judgment 95:21 153:4 153:12
Justin 2:3 4:15 56:11 154:14
JustinLesko@patent... 2:7

K

K&L 2:10 4:21

keep 45:4,7 55:12 122:9 129:19
kept 141:7
key 63:5
kidding 154:2
kind 101:16 113:1 118:14 130:19
kinds 61:10 62:7,14 114:8 121:19
know 7:21 11:14 12:2 12:11 13:21 15:22 19:15 20:9 22:8,21 23:13 28:15 31:17 38:3,11 45:12 47:7 53:25 54:3 65:6,7 68:10 71:21 73:4 75:18,19 76:16 78:23 83:20 84:10 85:20 95:4,11,15 98:10 99:9 101:13,15 102:1 104:11,12 105:24 107:12,25 109:8 112:10 114:13,16 116:7 125:2 126:17 128:10,25 130:18 133:12 134:4,24 138:24 146:14,21 147:3 150:11 152:7 153:1 160:20,21
knowledge 16:5 17:17
known 67:21 95:17 98:11 105:14,20 129:5 130:20,22 136:14 150:9,13

L

L 70:25
La 8:19
label 158:15
labeled 155:8 156:16
lane 95:12 99:12,21 100:6,11,16 101:17 102:11
language 18:23 19:1 46:21 50:7 81:2,7 83:14,15 93:24 105:1 124:16,21,24 125:2 138:8 139:1,20 140:15 141:3 145:1 145:17 146:4 147:6 148:19
languages 105:1 124:4 124:13,18 125:3,4,8 126:1 145:15,19
large 62:3 115:13
law 2:4 75:2,9 76:10,19 77:4 137:15 148:14
laws 16:4
lawyer 68:4
lawyers 18:4,11,13,16 18:21 19:3,12 20:12 21:5 22:1,7
leading 78:1 85:12
led 87:3 118:6
legal 13:13,22 18:12 19:4,19 20:7 26:21 59:11,18,23 60:3 68:1 68:4 74:23 75:19,20 76:4,9 83:8,15 90:7 90:16 108:1 153:12
Lesko 2:3,4 4:14,15,23 5:1,5,14,23 6:7,15 13:16 14:7,11 17:7,15 17:21 18:10,19 19:11 19:21 20:21 21:4,11 21:18,24 22:19,23 23:13,21 24:2,5,18,25 25:8 27:2,13 30:6,20 31:1,15,23 32:13,23 33:17,24 34:23 35:1 36:1,7 37:1,8,13,25 38:9 41:8,14,20 42:2 42:11,20 43:3,24 44:8 44:17 45:2,7,9 46:21 47:2,14 48:20 49:17 50:4,18 51:4,16 52:7 53:1 56:8,12,15,23 59:15,20 62:18 64:15 65:5 66:7 69:16,23 73:19,25 74:9,13 75:8 75:12,22,25 77:7,21 78:24 79:11 86:18 87:1 89:22 90:2,14 91:4 92:5,12 95:1,9 96:16,22 98:9,23 99:2 99:7,20 101:17,23 102:9 103:1,15,23 104:18 105:3 108:6 108:17 110:4,11,17 111:2 116:14 117:1,9 120:12,21 122:8,13 122:15,24 123:5,8,13 124:15,20 126:3,8 128:10 129:4,13,22 130:2,8,13,17 131:4 131:23 132:1,14,21 133:7,20 134:2 135:2 135:6 137:11 138:1 141:2 142:11 144:23 145:6 146:10,18 148:4,8 152:17 153:19 154:1,5,9,11 154:15 155:1 156:17 156:22 157:19 159:10 159:17 160:19 161:2
let's 19:24 20:5,8 28:14 29:1 31:2,15 33:17 36:8 40:23 41:20 45:10 47:15,17 55:23 58:8 60:14 63:21 77:22 78:10 90:15 91:5 94:8 100:2,4,5 104:18 106:16 107:5 107:17 115:4,25 117:21 118:8 122:15 127:20 138:25 139:10 139:13 152:18 156:13 158:4 160:9,25
letter 39:14
level 71:23 73:21,24 94:24 101:16
Liability 1:7
light 141:6
limitation 141:1,11 143:22
limitations 110:16 142:20
limited 1:6 28:22
limits 21:12
line 74:11,15 106:18,19 109:12 113:18 129:17 139:19 146:23
lines 74:11 96:25 107:5 146:20
link 11:17 82:6
linked 137:18,23 149:7
Lisa 2:4,4 4:17,17
Lisp 124:25 125:1
list 14:14 23:1,2,7,19 29:3 36:12 39:5,7 40:17 41:18 42:17 43:21 54:14 90:10
listed 14:12 23:5,14 27:17 29:21 31:13 33:15,20 35:17 37:17 38:19 44:15 71:4 152:21
listing 42:24 56:6
literature 113:19
litigation 24:11 40:25 53:7,11,14,19,23 55:15
little 36:8 96:18 147:6 150:24 153:24 161:10
LLC 1:6 2:4 4:6,16,19
LLP 2:10
local 140:9 143:20 144:15
locality 100:10
location 71:22
logic 61:12
long 11:21 56:10 68:10 114:22 115:23 122:14 128:13 142:19 154:3
longer 50:11 51:3
look 15:4,13 17:2 31:24 36:9 38:15,17 48:5 50:4 52:13 54:9 56:25 71:12 72:18 73:6 74:9 79:12 81:18 86:18 93:6 98:21 100:10 102:24 106:16 107:4 111:11 112:3,22 135:10,18 137:7,8 139:5 146:6,8,11,14 148:21 149:4 151:20 152:14 155:7 158:5 160:24
looked 11:2 30:21 35:14 77:17 83:21 88:24 93:12
looking 19:23 27:18 39:13 64:19 65:2,10 65:11 70:6 78:16 83:18 93:14 99:9 102:9 111:17 117:17 135:21 138:17 139:3 143:5 149:10 150:15 158:14
looks 73:8 78:4
lost 118:24
lot 61:9,13,13 77:18 100:8 130:17
lots 102:21 131:21
loud 22:25 79:15 117:24 119:4
low 105:12
lunch 105:25 122:9,11

M

main 122:6 125:13,17 126:4
maintain 130:4,10
making 23:19 95:20 113:15 132:10,12 160:4
manner 47:21 79:17,20 87:19,22
March 1:14 4:10 94:15 161:13
mark 70:14
marked 15:9 31:20 38:2 38:6 57:9,17 70:9,13 70:20 77:15 84:5 92:17 103:20 106:2 110:23 117:5 123:17
market 62:10
marking 77:7 92:13 103:15 105:23 110:17
Markman 53:25
matching 39:18
material 67:21 79:9,21

87:23
materials 14:8,12,16,24 21:13,19,22 23:3,21 24:8 27:17 37:3,24 39:5,6 43:10,13,17,21 43:22,23 44:9 57:22 57:25 78:17 147:20 149:24
matter 1:5 4:5 6:2 8:23 10:20 15:15 24:20 25:2,7,12 26:19 39:17 46:11 49:2 50:22 51:20 56:3,18 87:17 88:24 100:3 115:23 115:25 122:19 134:21 135:4 153:16 154:18 161:12,16
matters 13:2
mean 6:19,21 7:2,8 19:15,25 26:17 33:9 46:17 47:7 59:24 60:8 62:21,22 65:12 66:1 72:6 74:21 76:9 95:16 108:7 109:24 114:17 119:11 127:23 132:25 134:16 136:6 139:25 140:23 141:8 151:20 152:7
meaning 60:3 83:10,12
meaningless 97:5
means 53:12 66:25 74:16,19 75:6 76:16 77:4 82:17,25 83:17 88:20 92:5,9 119:12 124:16 141:19 145:4 147:3 150:22 151:8
means-plus-function 35:18
meant 13:6 69:25 128:5
measure 119:14
measurement 112:21 112:24 113:13
measurements 119:16
mechanism 151:21
meet 11:16,18,24 142:19
meeting 5:18 6:10,18 6:24 7:14
meetings 11:21
memories 65:10,12
memory 60:22 71:13,16 71:21,24,25 72:1 140:9 143:20 144:15
mention 44:8
mentioned 9:8 19:5 80:9 128:3 135:7,9 136:1,2 139:7 141:16
mentioning 44:14,23
menu 115:2
mere 98:14
message 119:22
met 37:8 106:24 139:23 140:2,13,16 141:15 143:10,13,14 144:21
Michelle 2:4 4:17
Michigan 2:5
micro 61:16,18,25
microcontroller 60:11 60:16,21,24 61:17 62:2 149:20
microcontrollers 62:9 62:15
microprocessor 58:3,5 58:9,16,21 59:8,14 60:1,5,8,11,15,18 61:1,6,17 62:2,19 63:21 64:1,6,8,17,25 65:9,23
microprocessors 59:1 61:10 62:9,15,24 63:3 63:18
mid-February 25:19
millions 101:14
mind 91:1
mine 27:1
minimum 142:6
minute 112:22 118:24 153:25,25
minutes 11:23 15:13 56:12 154:2
mischaracterization 102:15
mischaracterizes 33:8 35:22 36:24 46:17 48:11 49:4,22 50:24 51:10,22 77:1 103:5
mischaracterizing 129:25
misrepresentations 69:13
missed 23:19
mobile 12:3 118:3,13 118:17
Mobile's 22:7 128:12
modeled 59:1
Mollen 4:8
moment 31:3 41:10 78:22 145:16
monitor 72:19,21
monitors 151:21
morning 4:14
motions 112:25
move 37:2
multiple 41:4 116:14

N

name 4:8,14 8:14 70:24 90:21 96:3,5
named 66:9,14 71:4 92:24 93:2 106:14
names 33:4
narrowly 109:16
nature 17:4 116:12
Neal 4:9
nearly 160:10
necessarily 14:19 49:5 59:4 63:1,8
necessary 43:19 49:20 52:21,24 81:25
need 8:3 52:4 64:16,16 65:21 66:2 67:9 80:16 81:1,8 95:24 98:9 101:3 114:24 116:11 129:13 131:8 133:5 133:14 137:6,8 138:20 151:14 160:2 160:7,14 161:8
needed 17:8 51:12,18 64:24 112:10 126:18
needs 64:4 66:6 72:1 105:18 140:3 148:17 148:17
neither 46:18 156:8
Neodron 3:13
network 50:6,7,12,16 128:15 129:6 130:23 131:20 134:5,10,19 141:22 157:3 158:19
networks 126:24 127:22
never 55:1 57:21 95:23
new 87:17 88:24 95:15 119:23 121:15
ninth 100:20,23
non 95:12
non- 99:13
non-HOV 99:13,22 100:6,11,16 101:18 102:11
non-patent 113:19
nonce 152:16
normally 59:25 108:15 109:4,5 159:23
noted 129:15
notes 27:25 29:10
notice 1:18 73:3
noticed 69:16 70:2
notify 81:23
nouns 97:7
November 78:1,16
number 10:18 21:3 25:21 27:19 28:15 38:21 57:5,24 66:10 68:21 72:5 82:8 85:22 103:7 113:12 114:24 115:9,16 127:4,6
numbering 85:21
numbers 9:15 31:3 40:12 146:25
numeral 158:15

O

O-M-I-T 13:8
object 16:25 17:10 19:7 20:14 26:20 30:10 32:6 34:19 35:21 36:23 37:11,19 41:12 43:15 44:11,21 47:6 49:3 50:23 51:9,21 52:18 59:5,6,8,9 62:12 64:10,21 68:15 73:15 74:4,22 75:17 76:25 78:20 90:8 92:2 96:8 109:23 110:5,14 116:4,11,12,18,22 124:11 127:25 128:19 131:15 132:5 134:20 140:19 144:16 146:9 147:22 152:9
objection 13:13,20 18:6 20:25 21:7,15 22:8 23:10,24 24:15,23 29:24 31:11 33:7 41:24 42:6,15 44:3 46:16,25 48:10 49:21 59:10 86:14 89:16,25 90:5 94:13 98:3 99:1 101:11 102:2 103:4 104:10 107:24 120:11 125:24 129:9,15,19 129:20,22,23 130:3,3 130:8,9 133:1,11 136:25 156:22 157:19 159:10
objections 129:14
objects 63:15,15 72:24 116:15
obligated 13:11,18
obligation 37:9
obsolete 62:8
obtaining 127:7
occurred 119:18
October 58:8 60:14 61:6 63:22 64:9,18 65:7 84:21 85:2,13 86:7,8 94:8,10 113:21 118:8 120:3
offer 45:8
offered 52:17
offering 128:22 130:7
office 8:16,18 9:22 66:20 67:19,20 68:6,7

79:1,2 82:18 112:10
Offices 2:4
oftentimes 60:18
Oh 13:16 24:6 26:1 85:19 118:24 123:1 123:24 161:2
okay 4:23 5:14,23 6:7 6:23 7:5,16,20 8:1,2,7 8:13,21 9:4,13,24 10:11,18,23 11:5,16 12:6,11,19,24 14:23 15:11,12,19,24 16:2,8 18:1,20 20:5,21 22:24 24:6,18 25:9,15 26:7 26:17 27:2,14,25 28:14 29:1,18 30:6 31:22 32:24 35:16 36:18 38:15,22 39:21 40:3,8 41:20 42:11 43:24 45:14,17,20 47:15 48:4 49:17 50:18 56:9,14 57:2,12 57:20 58:2 59:21 64:15 66:16,24 67:11 67:15 70:11,16,23 71:2,6,8,12 74:12 75:12 77:9,22,24 78:10,24 79:12 80:6 84:12,13,24 85:7,20 85:23 86:6,18 87:2,7 88:17 91:5,24 92:13 92:14,19,22 93:1,4,9 93:10,25 96:1,24 100:13 101:5 103:16 104:2,6 106:6,9,10,15 110:17 111:1,7,14,22 112:15,19 117:11,12 117:17 118:8,23,25 120:22 121:6,14 122:13,24 123:8,14 123:24,24 124:21 126:20 129:13,20 130:13,17 132:1 134:8 135:7,12 138:23 139:12,19 147:13,18 148:7,9,24 149:2 154:9,24 155:4 155:7 156:13,15 158:4,14 159:2 160:19 161:4
omissions 70:3
omit 12:25 13:7
once 77:11 135:16
ones 18:15 33:11 53:7 80:13
online 9:21
open 6:17,19,22 7:6 38:1 70:17 77:10,11 77:22 92:20 123:1,15
Opening 54:10,13
operable 75:6
operated 128:6
operations 64:6,16 65:9 79:22 87:24
opine 36:2 51:5
opined 35:15,25 46:23 46:24 51:2 80:13 82:9
opinion 18:25 34:21 44:19,20 45:1 46:3 48:23 51:19 52:16 55:2 68:1 76:4,9 82:2 83:8 90:7,16 128:25 130:6 135:13 149:22 149:23 152:23 155:10 155:17,22 156:9,24 157:11,16 158:16,23 159:2,7
opinions 12:5,7 14:7 18:17,18 20:17 30:5 42:22 43:19 46:13,20 47:11,11 48:19 49:6 49:10,11 51:14,25 52:6,10,22,25 54:18 54:20,22,25,25 60:4 68:4 82:1 135:15 149:3 152:19,21 153:6 158:6
opportunity 49:19
opposed 146:4
option 114:12,14 115:2 116:1 155:19
options 129:2
oral 55:14
order 3:8 51:14 52:5,24 65:24 82:1 97:9 99:5 100:17 114:24 126:18 131:7 137:9
ordinary 26:15 27:4,7 27:10,11 59:12 65:25 67:5 83:12 94:23 96:11 108:1 114:19 115:18 136:8,9,14 137:19 145:21 150:9 153:13 156:5
original 86:1,2 157:23
originally 20:19
originated 18:25
outside 50:1 116:8 123:11 128:1,21 129:10 130:6 142:12 146:1,7,7 157:19 159:10
oval 115:12
overall 98:17 103:6
overwhelming 82:7

P

p 44:16
P-R-O-C-E-E-D-I-N-G-S 4:1
P-S-E-U-D-O 96:10
p.m 122:18,20,21,23 154:11,17,19,20,22 161:14,17
Pacific 4:11 56:22 161:15
page 3:4 15:20,20,21 15:25 16:3 20:3,10,22 20:22 22:20 25:16,17 31:25,25 33:3 36:9,12 45:12 47:16 50:4 70:24 71:6,9 77:23,23 78:8,12,15,18 79:12 84:19,19,20,25 85:4,4 85:8,9,11,16,18,21,22 86:11,11,12 87:9,10 87:12,15 91:5,7 93:4 97:25 102:10 104:16 111:8,9,9,15,17 112:3 112:19 125:12 139:14
pages 3:9 19:23,23,24 20:5,6,8,10,23 21:6 78:13,18 79:4 86:19 86:23 93:5,14 104:3,4 104:8 146:21
paid 30:3
panel 119:6
paragraph 22:20,24 26:12,12 27:15 29:3 29:22 33:18 35:6 37:2 37:4,17 38:19,22 39:2 39:6,7,9,13 41:20 42:25 43:5,14 44:15 45:11,21 54:10 74:18 75:3 77:25 78:5 79:13 79:15,18,25 81:1 85:9 85:10 87:13,14,20 88:2,20 89:3,5,8,15 89:21 91:1,8,8 96:13 96:14 97:7 112:4,6 148:9,21,22 149:21 150:2,4,15 152:18
paragraph's 97:8
paragraphs 45:25 46:5 46:15 47:17,19 48:5,8 48:13,17,18,21,24 49:18 50:19 51:6,17 52:9 146:5 149:11,16 152:21 153:6
paraphrase 69:3
parent 10:17
parentheses 95:11 102:11 109:10,11
parenthesis 102:12
part 31:10 32:3 46:22 50:10,21 55:15 57:21 60:5 68:4 75:14,20,22 76:6 81:6 90:10 100:1 121:9 142:4
partial 99:15
particular 19:16 33:12 40:12 48:17 72:3,17 77:20 82:3 96:2 98:21 100:14,15,24 109:3 114:1 116:11 120:20 120:23 121:3,25 135:1 136:13 141:9 148:1 151:7
parties 1:19
parts 15:1 21:5 30:8,12 30:14 34:11,23 35:13 35:14 51:2 60:7 125:13,18 126:4
pass 159:15
patent 3:8,9,11,12,14 9:15,22 10:18,25,25 27:19 28:10,15,16,23 28:24 31:3,5,24 32:8 32:25 33:1 40:7,10,13 40:15 50:9,9,12 57:5 66:20,21,22 67:2,17 68:6,7,11,13,24,24,25 69:1,2,6,9,10,22 71:17 72:8,17 73:17 73:22 74:11 75:4,15 75:23 76:2,15 78:1 82:20,22 85:12 86:2,3 86:10 87:4 88:7,12,17 89:15,24 90:4,17 91:14,16 92:1,1,24 93:13,16 94:6,10,10 94:19 95:8,22 99:11 100:4 101:2 106:13 106:15 107:11 112:10 113:18 117:15,16,19 118:5,6 120:19 121:14 139:16 140:17 146:19,24 147:9,14 147:15,19,21 148:14 150:1 155:5 156:14 156:21
patentability 67:22
patentee 145:12
patentee's 76:12
patents 9:14,20 10:22 10:23,24 11:1 22:14 28:9 31:2,7,8 33:12 38:14 39:22 53:5,7,13 53:22 54:7 66:10,10 66:13 68:18 69:17 71:2 73:13,23 74:6 75:20 90:22 127:5

128:4,14 148:20 149:1,4,8,19 153:10
pattern 153:8
patterns 128:9
paying 68:19
PDF 15:19 22:20 25:16 36:12 47:16 50:4 77:23 78:7 79:12 84:25 85:8,18,22 86:12 87:15 91:7 111:15 112:19 139:14
pen 105:20
penalty 16:3
pending 8:5 88:11
people 113:12,19
percent 19:16,19
percentage 19:11 20:21 20:23
perform 58:14 64:7 65:9 99:5 100:20,23 104:20 105:6 138:11 144:21 155:24 157:12 157:15,18 158:22 159:4,9,12
performed 37:23 113:9 137:22 140:11
performing 93:15 113:10 136:16
performs 142:14,17
period 139:21,25 140:11 141:3,8,12,21 143:8 144:20,24 158:18
periods 35:20 157:2
perjury 16:3
person 26:14 27:4,6,9 27:10 59:12 65:24 67:5,5 94:23 96:11 114:18,22 115:18 136:7,9,14 137:19 145:20 150:9 153:13
personal 8:9
phase 42:23
phases 58:25
phone 131:8,18,24 132:20,22,23 133:16 134:1,4,9,18 142:1
phones 118:3,13,17 126:24 127:22 131:5 131:12 132:2,6
phrase 46:4 47:12 50:11,14,15 55:22 58:12,16 65:5 75:5 131:11
phrased 91:3
phrases 50:11 51:3,7
physical 58:17,19,22 59:4,6 62:1,6 63:15 71:16,22,22,24 72:5 72:11,20,24 74:1,6,7
physically 62:3
pick 115:14
picture 71:19 140:5,7 142:1,5 143:16,18 144:10,12
pictures 140:9 142:5,25 143:20,24 144:14
piece 61:24
place 94:14 118:24 142:21
placed 21:12 73:10
plain 83:10 145:1
Plaintiff 1:8,18 2:2 4:16 4:18 5:11 9:3
Plaintiff's 9:25 15:5,9 15:12 31:16,20 33:18 35:3,7 36:9 38:1,6,19 38:23 39:3 41:1 42:12 42:25 44:10 45:10,20 46:1,6 47:15 48:9 50:5,20 51:7 52:10 53:9,10,17,21 54:2,9 55:9,16,24 56:25 57:9 57:13,14,17,20 70:7,9 70:14,15,16,20 71:3,7 75:15 76:2 77:9,15,22 78:11,19 80:7 84:3,5 84:7,14,20,25 85:4,10 85:11 86:7,19 87:9,11 87:15 88:5 91:6 92:15 92:17 101:18 103:15 103:17,20 104:4 105:23 106:2,10 110:18,19,20,23 117:2,5,18 119:1 120:2,8,15 121:11 122:25 123:14,17 126:15 139:10,14 149:12 155:4 156:13
planning 161:5
plans 129:1
platform 132:20,22
please 4:12 5:7 7:17 8:4 8:13 19:8 20:14 21:15 22:10 31:18 38:1 57:1 57:13 70:18 74:10 77:10 84:2,10 93:8 103:18 123:1,15 124:2 125:16 148:6 154:8 155:4,7
plus 19:16 76:16 77:5 82:17,25 88:20 92:5,9 136:19
poem 105:22
poetry 105:21,22
point 19:2 27:7,8 34:10 80:24 91:17
pointed 23:2 137:2
points 29:16 125:14,15
pokes 115:15
polite 122:10
poor 88:22
portion 32:21 40:3 52:20 84:16,18 99:16 99:17 100:25 101:1 101:21 121:7,12 155:7,12 156:20 158:5,7,14
portions 9:21,22 10:16 11:2 18:5,10,14 19:3 29:19 30:17 35:24 40:6 52:5,23 68:12 69:1,7
POSITA 149:23
positions 54:17
possession 67:8
possibility 133:10 142:13,17
possible 15:3 47:2,8,8 50:2 133:4,14,15 160:4
post-filing 69:21
potential 50:12
potentially 50:15 141:21 157:2 158:18
practice 67:6 68:12 127:18
preamble 35:20
precise 146:3
predecessors 10:22
predominantly 62:8
Preliminary 3:7,10 10:4 35:4
preparation 9:24 11:13 37:6
prepare 10:14 11:24 57:22 79:17 87:19
prepared 11:11 17:24 21:10 43:7 81:22 111:5
preparing 9:6,10,13,18 10:3 11:6,9 16:15 23:8,15,22 24:7,12,21 25:3,10,25 26:5 27:19 28:16 29:4 30:24 34:3 40:20 41:1,4,22 42:4 42:9,13,18 45:24 47:20 56:3,7 69:25 75:10 135:3
present 1:18 4:12 8:12 52:3 122:6 158:11
presented 54:19 88:16 112:1 149:8,18
pretty 68:16 97:5
prevent 128:16 129:7 130:24
previously 33:11 144:22
pricing 127:13
primary 58:12 61:23 128:7
prior 24:12 25:3,24 26:5 26:8 31:13 32:15 41:18 53:4,7,11,14,19 54:1 67:10 69:10,20 114:15 116:3 119:12 120:5,6,9,12 129:1 152:19,20
priority 128:13 129:4 130:25
privilege 22:13 68:20
privileged 18:8 19:7,9 20:14,15 21:16 22:9
probably 33:14 61:3 64:12 79:5 101:3 112:5 116:17,18,19 116:23 118:10 134:13 134:15 141:6
problem 45:8
problems 137:2
proceed 100:17 102:7
proceeding 54:1 55:16
proceedings 53:4,20
process 113:6
processing 113:14 119:8
processor 138:10 151:12
processors 62:7
produced 68:21
program 61:11 93:18 93:19,22,23 94:2 98:23 109:9,14 124:8 137:12,16,17,22 138:3,6,16,21,22 139:2,6
programmed 58:15 125:1
programmer 93:25 94:4 94:12
programming 3:14 93:24 97:14 98:11 105:16 124:4,13,16 124:18,21 125:2,3,4,8 125:23 126:1 132:14 136:19,20 139:1 145:15,17,19 151:10
proper 130:3
Proposed 9:25 10:5 35:3,5 40:18
prosecuting 69:18 70:4
prosecution 32:2 40:4

40:5,6,13,14 67:17 80:3 81:14
prosecutor 69:9
prosecutors 69:6
protocol 135:1
protocols 134:22,24
provide 12:15 22:1 26:18,23 46:13,19 49:6 51:12 67:7 68:23 82:1 105:11 107:8 136:21,23
provided 10:7 15:5 18:13 21:20,23 22:4 25:20 30:16 38:13 41:17 43:19,20 46:3 47:11,12 51:19 53:18 64:23 74:25 78:4 88:6 110:16 113:11 135:23 137:12 153:3
provider 128:7 131:19
providing 17:16 26:24 49:11
provisioning 131:19
pseudocode 93:20 96:10 146:2
pull 15:6 31:9,15 32:8 32:25 50:13 57:13 65:8 84:2 103:17 148:4
pulled 9:21 32:16 78:4 79:1,3
punctuation 95:17
purchase 161:5
purpose 51:24 58:13 105:17 108:21 149:18
purposes 27:2 34:21 37:5 44:7
pursuant 1:18
put 34:22 70:6,14 73:13 84:8 90:15 104:13 105:18 140:25
puts 108:13
putting 117:1 135:13

Q

qualifications 26:13 27:6
qualified 26:18,23 50:17
quality 113:14
quantitatively 63:13
query 99:9,12,13
question 7:18,21,24,25 8:5 13:16,22 24:3 26:1,8 29:21 41:6,7,9 41:14 48:6,22 55:18 55:22,23 61:15 66:17 82:21 87:10 89:20 90:2 111:16 131:6 136:7 150:24
questioning 129:17
questions 7:16 14:3 27:16 40:1 41:18 136:8 153:20 159:14 159:18
quickly 93:13
quite 22:12 62:16 64:13 133:15
quotations 32:11
quote 32:19 81:12 121:21 128:12,17
quoted 19:20 20:2,4

R

R 4:9
raise 5:7 70:3 83:16 160:3
range 20:22
raw 19:17
RCS 149:20
reach 82:8
read 9:19,22,25 10:4,10 22:25,25 29:22 30:2 30:14 31:4 32:3,5,7 32:16,19 33:3,10 34:8 35:9,10,13 39:9 41:8 41:11 46:2,6 47:19,24 52:22 54:11 69:9 71:17 72:8 74:14 75:14 79:14 87:14 88:6 93:7 104:4,8 106:12,20 108:7,9 113:1,2 117:23 119:3 123:25 125:15 149:4 149:10 151:3 152:20 161:10
reading 34:12 67:15 91:20 93:25 108:10 111:24 128:10,11 129:11,18 140:15 150:2
real 109:24
realize 115:3 120:6
really 22:9 63:16 65:21 75:19 90:11 100:3 111:4 115:23,24 117:22 137:2 141:13 141:17
reason 80:15 90:12 135:12 153:5
reasonable 63:18 65:24 83:4,9,19,21
reasonably 106:4
reasoning 153:2
reasons 90:10,13
recall 11:8 14:15 18:10 18:15 19:10 20:11,18 23:11,16,20 27:22,24 29:7 33:11 34:2,4 44:14,23 48:12,16 52:12 56:4 57:19 72:16 80:2,7 83:1 90:20,21 129:1 135:7 154:25 156:16
receive 134:9,18
received 28:8,13 75:8
recite 151:4
recited 155:15
recites 79:20 87:22 138:12
recognition 149:19
recognize 57:3 77:12 77:19 84:15 92:22 106:10 111:3,6 114:23 115:15 117:12
recollection 55:11 147:16
record 4:4,13 5:24 6:1,3 6:6 7:10,13,22 8:14 17:9,13 23:8 30:14 41:11 56:17,19,22 75:15,21,23 76:7 79:15 81:6 104:14 122:15,18,20,23 123:12 154:17,19,22 159:19 160:20,22 161:1,15,17
recorded 18:18
redefine 76:10
redirect 153:24
reevaluate 27:8
refer 9:2 52:15 58:17,21 59:6,21 62:5 71:25 112:20 120:5
reference 32:16,20 85:1 112:19 147:1,4,19 148:11,15 149:25
referenced 10:19
references 31:7,9 32:1 32:2,15 33:2,15 52:2
referred 32:10 33:2 53:3 60:19 80:12 90:18 120:15
referring 19:22 20:2 31:12 54:24 59:22 61:18 72:3 86:7 91:19 133:21 136:19,20
refers 54:10 62:20 86:8 148:25 150:16 152:18
reflect 150:20,25 151:2
reflected 69:11
reflects 67:23
refreshed 117:7
refreshing 84:9
refrigerator 61:22
regard 14:4 116:6
regarding 26:9
Regardless 130:20
register 61:12
rejected 91:9,15
rejecting 90:10
rejection 32:13 90:12 90:13
rejections 89:23 90:3 90:14,17 91:18
related 10:24 12:6 35:24 54:17,21
relating 25:12 38:14
relationships 137:20
relatively 65:21
relevance 13:24 41:13 41:24 42:6,15 43:16 94:15
relevant 9:23 12:25 13:4 14:4,17,20,22 15:1,2 24:9 30:4,18 35:15 37:9,24 43:18 44:19,19,25 47:3,9 54:18,21 67:10 76:17 80:21 81:17,24 115:25
relied 42:9,18 56:6
rely 42:13 46:2
relying 48:16
remainder 101:3,9,13
remarks 78:6,14 86:12 86:17,22 91:20
remember 83:14 91:13 135:9
remotely 4:8
renew 13:20
repeat 41:16
repeated 55:4
rephrase 7:22
replacements 63:7
report 49:24,25 83:15 131:13
reporter 4:3,9 5:1,3,6 5:25 6:5 41:8,10 56:16,21 122:17,22 154:16,21 160:14,25 161:4,9
represent 4:13 24:18 24:25 78:25 86:20 127:7
representations 30:15
represents 73:18,20
request 8:4 12:5 21:19 21:22 81:22 82:15 160:13
requested 90:23
requests 79:22 87:24

require 156:6 158:2
required 27:1,9
requirement 115:20 125:3
requirements 115:17
requires 158:21
requiring 158:1
research 24:8
respect 25:6 49:15 75:3 77:4 81:9 135:16 148:1,2,15,18
respective 1:19
responded 90:24
response 41:18
result 18:15 31:13 100:19 101:24 102:4 102:6,12,15,25 103:3 103:8
results 102:22 113:11
resumed 6:3 56:19 122:20 154:19
retained 12:4,20
returned 100:2,7
returns 101:7
reveal 18:7 19:8 20:15 21:16 22:10
revealing 22:13 27:17
review 9:7,11,14 14:23 15:17 18:1 21:13,20 22:2,4,17 24:11,13,21 25:2,5,24 26:4,8 28:9 32:9 33:15 34:24 35:11,23 37:3,14,23 39:15 40:4,6,20,25 41:22 42:4,12 43:9,12 43:23 44:1,6 45:25 51:5,11 54:12 55:13 56:1 70:2 76:14 80:2 82:16,22 109:21 147:7,13 159:16,23
reviewed 10:14,16,21 10:25 11:6 14:8,16,20 14:21,24 16:14 18:22 20:20 22:6 23:3,8,15 23:18,20 24:16 26:2,3 29:4 36:20 37:6 38:24 39:20,22 40:2,10,12 40:14 41:4,19 42:9,18 43:4,14,17,22 55:19 57:22 79:6,10 80:4 128:20 135:2 148:17
reviewing 14:25 23:22 27:21 28:1,3,6,16,19 28:23 29:8,11,13 33:19,25 34:5,17 47:19 66:8 81:7 134:22 139:3
right 5:7 6:5,25 8:16 10:12 12:22 13:7,12 16:16 17:18 22:15 26:7 36:16 39:24 40:10 43:7 45:7 47:24 49:20 50:14 55:17 59:16 63:15 67:12 68:3,7 69:24 73:22 74:3 75:10 77:7 79:5 81:14 88:4 93:2 95:1 96:1,25 98:12 99:7 102:9 103:3 104:15 109:7,22 111:7 112:8 112:13,17 113:23 116:25 120:6,9 125:11 127:20 128:3 134:6 135:4 137:24 140:21 143:5,25 146:24 154:16 160:16 161:9
roaming 126:21,25 127:3,21 128:16,17 129:2,6,8,18 130:23 130:25 131:5,7,9,13 131:14 132:3,4,8,8,16 132:16,24 133:10 134:3 135:8,13,17 136:1,1
role 66:23
rough 159:21 160:6,15 160:19,23 161:3,5
roughly 19:13
round 115:12
RSC-164 149:6 150:1 150:10
rule 12:12,12 18:6 19:7 108:1
rules 4:24 5:15 6:8 7:8 67:16
run 30:20
running 7:2
rushed 37:14
Ryan 41:21 42:3

S

S 2:5
Samsung 3:13
Santa 8:20
save 32:24
saw 17:7 53:17 139:6 140:21 155:25
saying 11:1 90:24 96:13 97:6 98:6 114:11 132:23 142:16 143:1,25 144:2 152:11,11,12
says 12:13 16:2 23:2 26:13 50:5 67:16 70:24 71:13 75:7 77:25 78:16 79:13,14 85:8,10,25 91:8,9 99:11,12 104:19 107:5 109:9 123:25 125:12 128:12 139:20 140:10 141:9 142:9 142:21,22,23 143:8 143:23 144:19 146:24 149:21,22
scope 13:25 128:1 129:10,22 130:6,9 142:13,16 156:22 157:19 159:10
screen 6:12 113:16 114:6,13 115:3,6 116:10,16 119:5,6,7 119:13,14 120:20,23 122:1 123:15
screens 117:25 118:15 119:13 120:13 121:19 122:4
scroll 15:19 25:16 26:11 27:14 37:1 71:6 74:10 85:8 93:4 111:8 117:21 125:11 139:13 146:20 148:22
se 115:5 138:18
search 31:14
searches 30:20
Seattle 2:12
second 11:23 70:12 77:8 117:8
secondary 127:14,17
seconds 15:13 154:1
section 19:4 33:2 67:22 74:18 79:18,24 81:1 87:20 88:1 90:18,18 91:2,10,16 111:14 112:20 113:3 119:2
sections 19:12 20:11 30:1
see 6:20 7:4 15:21,23 16:6,7 17:12 22:22 23:5 26:15 33:22 35:6 36:13 39:5,7 42:20,24 45:18 70:23,25 71:10 71:13 72:4 73:1 78:8 82:17,23 84:22 85:5 85:15,16,23 86:4 88:18,21 89:3,6,9,12 89:18,22 90:3,7,14,16 91:10,13 92:14 104:18 110:25 111:9 123:11 135:10 137:25 139:5,8,23 140:20 142:8,21 143:6,21,22 145:5 147:1,8,14 154:11 156:19 160:6
seeing 80:2 83:1 90:20
seen 25:11 40:11 55:1,5 55:8 57:14,19,21 79:5 79:6 80:6 88:24 89:2 103:24 123:20 128:11 128:20,23 129:11 153:2,3
select 114:20 115:2,4,7 115:7 116:11,13 128:15 129:6 130:22
selected 14:17 155:19
semantics 36:4
send 133:17
sense 59:23 101:12 160:5
sensed 119:6
sensing 111:23 112:7 112:24 121:5,10,13 121:15,17
sensitive 111:19,22 142:3
sensor 119:7,9,15 120:18,18 121:22 140:8 142:2 143:19
sensory 149:6
sent 5:21 106:22 107:3 152:1
sentence 74:14 75:13 76:17 87:13 106:18 108:4,15 112:22 113:1,4 117:23,23 119:2,4 125:15
sentences 98:7 123:25
separately 36:6 77:22
sequence 95:18 100:17 102:7 103:10 113:7
series 103:1
seriousness 16:9
served 24:19 25:1
service 127:7 128:7 140:5,7 142:6 143:16 143:18 144:11,12
set 48:17 49:7,15,24,25 93:21 102:18,19 131:20 133:6 134:3
setting 105:4
shape 114:21 115:24 116:6
share 148:10
short 56:9 161:10
show 13:14,15 19:25 67:7
shown 25:20
sign 159:16,24
signal 63:23 133:9
signals 119:14,16
signature 15:16,21,24 111:9 161:17

signed 16:12 18:2 111:12
significant 111:25 112:16
silicon 61:24
similar 36:5 63:13 77:18 84:17 160:17
simple 55:12 98:18 108:19,20
simpler 31:17 104:19
simply 30:4 46:18 98:18 108:3 127:9 133:16 138:12,21 142:23 146:12
simulated 59:1
Simultaneous 36:11 44:2 85:24 95:13 102:3
single 60:20 61:15,24 102:24 152:6
sir 90:4
situation 71:20 115:18 134:17
situations 22:17
size 61:22 62:1,6 114:22
skill 26:15 27:4,7,10,11 59:12 65:25 67:6 94:23 96:11 114:19 115:18 136:8,9,15 137:20 145:21 150:9 153:13
skilled 63:22,23 64:8,17 65:6 96:6 105:15 126:13,14 150:21
skim 30:7 34:12 38:10 47:18 77:12
skimmed 29:19 30:8,12 34:13
skip 31:9 32:3
skipped 30:8
slightly 65:18
slowly 7:17
small 101:21 115:13
smaller 65:19
smoke 63:5
software 72:15 132:23 137:5,6 138:18 156:7
solely 36:20
somebody 28:5 64:17 115:13,14 133:4
somewhat 127:18
soon 106:4
sorry 5:5 21:21 24:2 27:23 29:20 48:5 66:18 70:12 79:2 82:19 85:1,19 86:11 87:9,10 92:13 97:20 111:16 118:23,24 123:1 156:23 161:3
sort 62:10 77:11 78:7 100:7 105:14 129:25 138:2
sounded 70:1
sounds 55:13 56:16 131:2 154:13
speak 153:22
speaker 72:19,22
speaking 36:11 44:2 81:4 85:24 95:13 101:6 102:3 129:14
specialized 151:13,15 156:7,7 158:2
specific 20:22 32:11 49:7,12,15,24 60:2 63:23,25 65:22 97:10 99:5 101:21 107:17 108:20 109:22 114:15 114:17,20 115:17 124:5 135:19 136:14 136:16 148:16 151:4 151:18,22,25 153:15
specifically 48:18 79:19 87:21 91:9 124:22 136:21 149:25
specification 11:4 75:22 76:2,11 81:3 82:5,11 83:13 90:9,25 91:22 93:16 109:18 135:17,22,23 136:2 137:7 138:15 139:9 141:18 150:1 153:18 156:10 157:17,23 159:9,12
specifications 68:13 153:11
specificity 95:18 152:4
specifics 96:2 100:4 115:10
specified 158:9
speculation 133:11
speculative 17:11
spend 11:9 27:20 28:23 33:25
spent 27:16 28:16 29:7 34:16,20
square 115:11 116:20
stand 160:1
standard 59:18 80:10 80:23 81:2 83:4,5,9 83:11 84:1
standards 18:13 76:21 83:7
stands 44:13
start 4:24 5:15 6:8 29:22 31:5 34:8 35:9 48:6,21 71:18 82:21 87:11 124:2
starting 25:17 31:25 36:9 47:16 111:14 112:4
starts 33:3 87:14 112:23 119:3 120:1,7 149:22
state 8:13
stated 104:7
statement 3:14 16:11 64:20 74:21 76:1,6 80:3,8,14 81:19,21 88:5,9 91:12 96:16,25 97:3,4 99:14,16 101:6 104:2,23 107:8 118:4 118:9,25 119:25 120:3,7 124:1,3,10,12 124:16,22 125:12,13 125:17,22,23 126:3,9 126:16 128:18,24 130:1,15 131:2 138:25 145:14 146:2 146:16,16,17 147:8 147:14
statements 49:8,14 75:20 88:14,15 96:4,5 96:7 97:13,18 104:3,9 104:22 105:5,16 124:19 149:16,17 152:24
states 1:1 16:4 42:21
status 61:12
step 95:20 100:20,23 102:10,13 109:25 110:3
steps 93:21 95:18,19 100:18 102:8,17,18 102:20 103:2,10 105:11 108:13 113:7 113:8,8,10
stop 106:4
storage 71:22,24 106:22 107:1,7,20 108:8 109:11
stored 106:25 107:6,19 140:9 143:20 144:14
straight 113:18
structural 59:8 139:2,6 151:24 153:17
structure 59:9,14,15,21 59:22 74:1 79:21 82:4 82:5,6,12 87:23 98:17 121:25 124:1,4 135:20 136:4,5,11,14 136:18,21,24 137:10 137:11,13,21,25 138:9,20 141:14 145:10,13 146:11 150:13 151:5,6,18,22 152:1,8,10,13 153:14 155:23 156:2,3,3 157:12,14,17 158:3 159:3,5,8,12
stuff 7:2
subject 89:14
submission 79:3,6
submitted 8:21 15:15 39:16 46:10 49:1 68:14 111:12 160:2 160:10,10
Subsections 44:16
substantial 48:16 113:20,25
substitutable 65:15
sufficient 12:14,16 34:17,20 64:11,23 67:4,7 69:15 91:21 94:20,23 95:22,23 98:20 99:4 101:1 107:13 109:3 135:20 135:24 137:21 138:11 153:14,17 155:23 157:12,14,17,24 159:3,5,8,11
suggested 82:13
suggesting 142:15 159:24
suggestion 149:6
suitability 150:11
suitable 63:1,3,4,7 64:3 64:7 66:5 114:8,9
Suite 2:5,11 8:19
summaries 30:19
supercomputing 63:4
support 79:21 87:23 91:22 94:22 101:2 135:24 139:8 153:17 156:11
supportable 107:16
supported 82:11 90:9 90:25 127:8,17 138:14 141:18 157:23
suppose 76:13 109:15 110:10
supposed 12:7,13 161:2
sure 5:15 6:19 7:2,8,14 17:7 22:12 26:1 50:13 55:18 78:23 79:16 106:21 112:12 117:10 124:3 129:22 130:11 132:18 145:18 154:15 155:25
surrounding 113:2
suspect 112:11

swear 5:2,3
switch 72:12,13 128:16 129:6 130:23
switches 72:4,6,15
sworn 5:12
system 60:2,6 94:5 108:5 120:17,17 121:3,10 127:15 141:21 142:14 144:6 151:21 157:1 158:17
systems 129:3 133:24 133:25 134:13,14

T

T 39:6,15
T- 12:2 22:6 128:11
T-Mobile 1:10,10 4:6,6 4:22 8:22,23 9:3 13:10,18 14:5 19:18 19:18 20:12 24:19 25:1 36:19 161:13
T-Mobile's 18:4,11,13 18:16 22:1
table 36:15,15
take 8:6 15:12 27:25 29:10 45:3 56:8 83:24 93:6,7 102:17 105:11 108:15 112:21 122:8 122:11 130:14
taken 4:5 42:3 79:16 87:18 103:3,11 113:7 140:3 161:12
takes 152:12
talk 59:13 123:3,5,6 127:20 136:4 151:5,6 151:9 160:9,14
talked 20:6
talking 10:12 20:23 25:9 40:19 60:14 62:3 65:25 85:9 94:8 96:12 110:12 113:3 120:6 142:12 150:7
talks 140:4
tapped 113:16
task 114:15,17
tasks 58:14
TCL 40:19,24 54:1 55:16,25 56:2
TCL's 54:17,20
teachings 148:2
team 19:19
technical 13:2 84:11
technique 105:13
technology 111:19 112:8 131:24 134:4,5 134:9
Teleconference 1:18
tell 39:14 43:9 47:18 69:14 77:12 84:18 96:14 97:8 98:7,15 105:10 108:22,24 113:2 132:10,18 134:12 137:4 152:13
tells 133:9
ten 11:23 102:8,18,19 103:10 154:5
tens 63:6
term 35:15 46:22,23 50:6 58:3,21 59:4,6 59:12,25 61:16 63:21 71:16 74:16 127:5,21 128:4 137:18 151:24 152:16 153:14
terms 30:21 35:17,19 35:24 36:1,13,21 40:18 47:4,10 50:19 50:21 51:2 82:11 92:10 97:5 110:7 137:10 140:13
test 83:17 100:18 101:20,24 105:10
testified 5:12 42:16 43:21 48:2 52:19
testify 8:10
testimony 12:13,15,20 12:25 13:25 14:4 16:24 17:6,16,20 25:13,21,24 26:2,5,9 26:18,23,24 33:8 35:22 36:24 38:13 41:22 46:17,20 48:11 49:4,22 50:24 51:10 51:13,22 55:7 59:23 77:1 103:5 128:22
TEXAS 1:1
text 20:18,19 32:7 69:8 72:10 73:18,20
Thank 9:6 31:24 56:14 107:4 124:9 153:22 154:10,13
thanks 45:17 56:15 69:24 84:13 106:8 123:14 139:13 153:21
thing 97:20,21 152:14 159:18
things 30:2,4,19 42:8 62:25 63:2 65:12,15 66:2,3 90:8 100:9 114:9,10 142:20 144:2 145:21,23,24 151:7,9
think 13:22,25 14:17 15:20 17:4 19:12,25 20:6 21:2 30:13,25 32:1 33:11 46:8 51:12 53:2 54:12 58:6,10 59:11 61:3 70:13 71:17 72:11 76:10 83:12,13,15 88:22,23 91:2 93:12 94:2,15 96:10 102:14,23 106:6 107:10 111:7 112:2 113:25 116:5 116:11,23 117:11 118:12,20 120:5 127:24 128:25 129:16 130:2 134:12 137:24 138:13 139:15 141:9 144:5,17 148:5 150:25 151:2,23 153:5,19 157:22 159:22 160:13,16,23
third 79:13 102:20
Thirty 154:1
thorough 37:4
thought 9:23
thousands 44:6 63:6 101:14 145:18
three 11:22 29:3 36:5 36:12,20 51:1 106:16 106:17 139:22 140:1 140:12,14,16 141:14 141:17 142:23 143:2 150:16 155:8 156:17
Thursday 159:20
tight 160:16
time 4:11 8:12 11:9 16:12 22:3 27:16,20 28:16,22 29:7,17 30:3 32:25 33:25 34:17,20 43:6,18 58:11 61:4 62:15 67:1,9 68:10 69:14 75:2 76:12 80:25 88:16 91:17,22 93:7 99:8,11,13 116:16 127:18,19 141:12 143:23 153:21 153:21 154:12 161:14
timeframe 58:7 60:13 60:18,21,24 61:6,11 61:19 62:5,25
times 11:18 30:6 41:4 42:8,17 48:3 57:25
timing 159:19 160:16 161:8
tiny 100:1
today 8:8,11 10:11 17:9 17:16,20 83:5 95:21 153:20,22
today's 4:10,25 5:17 9:6,10,13,18,24 10:3 10:12,15 11:6,10,12 11:25 16:15,23 161:13
told 28:11 34:24 37:14 39:19,25 41:3 42:7 44:22 46:14 57:25 64:1,24 65:3 66:1 82:24 152:3 160:23
topic 13:5 46:19 48:18
topics 46:12 49:7 66:9
total 152:15
totality 98:22
touch 111:19,22,23 112:7 113:13,22 114:6,12,14,22,23 115:21,21 116:1,2,8 116:10,17,19,20 117:25 118:15 119:5 119:6,7,9,12,13,14,18 119:23 120:12,20,23 121:9,19,22 122:1,4 142:3
touched 114:13 116:8
touches 121:3
touching 114:5 119:5
touchscreen 33:12
touchscreens 111:22
tower 128:6 133:9,16 133:18,19,20 134:1,9 134:19
towers 127:9,9,12
traffic 95:11 99:12,21 100:5,11,16 101:17 102:11
transcript 42:3 159:22 159:24 160:7
translated 119:19
translates 119:9
translating 119:16 121:2,22
translation 120:14
transparent 128:8
treated 147:20
tried 19:14
trivially 109:16
true 16:5,19 17:17,20 18:23 61:4 79:4 87:2 100:12,13,15,21 101:7,13,24 102:5,13 102:16 103:2,3,8 105:2 112:12 118:9 120:3 124:6,13,24,25 125:7,19,21 130:16 131:3 142:7 144:5,9 145:25
try 7:21,23 8:5,5 30:22 55:23 84:9 160:3,9,17
trying 14:2 110:7,8 113:17 122:10
turn 22:20 33:17 39:2 45:11 99:6 111:17

129:2 131:7 139:10 152:18 155:4 156:13 158:4
turned 69:8
TV 72:20,21
Twice 11:20
two 35:2 38:14 51:1 53:13 55:4,4 104:3,4 104:8 106:16,17 123:25 125:13,14,15 125:17 126:4 140:16 141:17 148:20 153:24 155:8 156:17 158:15 158:15
type 63:23,25 72:13 94:1 95:2 97:2 98:25 113:21 125:8 132:15
types 96:6
typical 73:11
typically 58:17,19 59:13 60:8,19 73:10 119:18 119:21

U

U.S 3:6,6,8,9,11,12,14 9:15 10:18 27:18 31:3 57:5 66:10,20 92:1 146:24
U.S.C 74:17 75:3 79:18 79:24 87:20 88:1,19 89:2,20 90:18
underlying 105:12 152:14
underneath 78:7 97:1 117:22
understand 7:20 9:5 12:19 13:3 34:18,21 51:23 55:18 64:18 65:25 68:3 94:1,7 96:12 98:9 99:21 105:21 108:7,10 109:13 136:8,9 137:7 137:9,20 143:25 144:1 147:18 150:5 153:14
understanding 12:21 12:23 27:9 38:12 53:10,12 66:24 67:3 67:13,23 68:2 71:15 74:20 75:2,5 76:20 80:20,23 91:20 96:19 96:21,23 97:2,6 111:18 125:23 137:14 140:24 142:18 147:5 147:24 148:11,12,13 150:20 151:11
understood 7:25 13:9
undertaken 79:19 87:21
unhelpful 13:10,17
unit 61:12 119:8
United 1:1 16:4
unlimited 129:1
unnecessary 51:5
Unrelated 11:13
untrue 16:22
unusual 73:16
Updated 40:17
upload 128:16 129:7 130:24 140:6 142:9 142:24 143:17,24 144:12,21 155:18,19 157:1
uploaded 77:9 122:25 142:5
uploading 141:10
uploads 142:14,18
USA 1:10 4:6 8:23
usable 7:1 119:10,17 121:23
usage 61:3 127:20,21 128:9
usages 127:19
use 56:13 58:12 59:5,25 63:21 74:16 96:6 98:25 100:5 104:22 105:5,15 120:18 126:19 145:3,8,9,21
user 114:5,13 115:6 131:7,13
users 128:14 129:5 130:22
uses 152:15 155:20
USPTO 67:15,24
usually 59:7 62:1 64:15 125:6 152:5

V

v 1:9 3:13 54:1 55:15,25 56:2
vague 17:1 24:15,23 29:24 32:6 44:12 46:25 47:6 51:21 52:18 55:23 59:10 62:12 64:21 73:15 92:2 94:13 98:3 99:1 101:11 104:10 110:14 124:11,12 125:24 130:5,5,8 133:1 140:19 146:9
value 102:24 103:8
variability 61:9
variables 151:22
variation 61:13
variety 65:15 118:1,16 121:24 127:7
various 32:1 79:22 87:24
vary 119:21
vendor 127:12
vendors 127:6,10,12
verbal 69:5
verbatim 69:2
verbs 97:7 98:6
verified 32:18
verify 32:12
versus 40:24 95:5
video 1:18 11:17
view 76:23 81:24 83:13 144:24
viewed 39:23
virtual 71:25
virtualized 59:2
Vision 1:6 4:5,16,19 55:25 56:2 161:12
voice 149:18
vs 4:6 161:12

W

WA 2:12
WACO 1:2
waived 161:18
want 5:2,16 7:14 8:15 8:16 13:4,7,14 39:18 45:3,3 68:17,19 90:6 99:8 104:20 109:7 114:13 115:15 130:4 130:9,18,19 154:3 160:21
wanted 98:23 114:22 115:4 116:1,10 152:3 159:18
wasn't 14:21 19:17 57:21 58:22 68:19 81:24,25 138:25 153:11
way 45:4,5 48:16 52:14 53:6 54:3 55:5,21 61:21 63:12 65:5 67:13 78:14,14 82:14 83:2 87:6 88:21 89:11 90:15 91:3 92:9 97:10 99:24 105:19,25 109:5 112:5,6 123:11 125:25 128:9 131:11 131:20 133:8,13 134:25 136:12 137:19 142:4 145:3,19
ways 69:4 125:5 127:4 127:7
we'll 37:1 77:23 154:11 160:12
we're 5:25 6:5 7:10,11 7:13,14 25:9 26:11 40:18 56:16 60:14 83:5 94:8 117:17 120:6 122:17,22 154:16,21 160:4,16 161:7
we've 45:2 48:2 55:19 57:6,24 137:14
web 6:22,23
Weiskopf 2:10 4:20,20 5:21 7:7 11:16,19 13:13,20 16:25 17:10 18:6 19:6 20:13,25 21:7,15 22:8 23:10,24 24:15,23 26:20 29:24 30:10 31:11 32:6 33:7 34:19 35:21 36:23 37:11,19 41:12,24 42:6,15 43:15 44:3,11 44:21 46:16,25 47:6 48:10 49:3,21 50:23 51:9,21 52:18 56:10 56:14 59:10 62:12 64:10,21 68:15 73:15 74:4,22 75:17 76:25 78:20 86:14 89:16,25 90:5 92:2 94:13 96:8 98:3 99:1 101:11 102:2 103:4 104:10 104:13 107:24 109:23 110:5,14 116:4,22 120:11 122:14 123:3 123:7 124:11 125:24 127:25 128:19 129:9 129:14,16,24 130:5 130:11 131:15 132:5 133:1,11 134:20 136:25 140:19 144:16 146:9 147:22 152:9 153:23 154:4,7,10,13 154:24 155:3 156:24 157:8 158:4,13 159:14 160:12 161:5 161:7
well-known 128:14
well-written 73:17
went 6:3 56:19 122:20 154:19 161:17
weren't 21:20 30:4 63:1 83:23
WESTERN 1:1
whichever 15:6
wide 65:14
widely 117:25 118:12
window 6:20
wise 20:21
withdraw 29:20 48:6,22 66:17 87:10 111:16 131:6

witness 3:2 4:21 5:10 5:22 6:14 13:21 14:10 17:2,12,19 18:9,12 19:10,14 20:16 21:2,9 21:17,21 22:12,22 23:11,16 24:1,4,16,24 25:5 26:22 27:5 29:25 30:12,24 31:12,22 32:7,18 33:9,23 34:20 34:25 35:23 36:3,22 36:25 37:5,12,21 38:8 41:16,25 42:7,16 43:2 43:17 44:5,13,22 45:5 46:18 47:1,7 48:12 49:5,23 50:10,25 51:11,23 52:19 59:11 59:17 62:13 64:11,22 65:11 68:17 69:20 73:16,23 74:5,12,24 75:11,18,24 77:2,17 78:21 79:8 86:15,25 89:18 90:6,20 92:3,8 94:14 95:6 96:9,20 98:4,13 99:3,15 101:12,20 102:4,14 103:6,22 104:11,16 104:25 107:25 108:11 109:24 110:6,15,25 116:5,23 117:7 120:16 122:11 123:4 123:6,10 124:12,18 125:25 126:5 128:3 128:23 130:14 131:1 131:17,25 132:6,17 133:2,12,23 134:21 135:5 137:1,16 140:20 141:4 144:17 144:25 146:12 147:23 148:7 152:10 155:2 156:23 157:6,20 158:8 159:11,15

Wolfe 1:16 3:3,5,13 4:5 4:23 5:2,6,9,14 6:7 8:15 13:19 18:8 19:8 20:15 21:16 22:11,21 31:18 37:25 41:9,15 45:4,15 56:25 57:12 58:2 70:25 74:10 77:11 84:2 92:20 103:17 104:24 105:24 107:4 110:21 122:10 122:24 139:11 146:21 153:20 154:24 161:11

Wolfe's 128:1

word 17:24,25 58:16 61:16,25 74:19 116:19 119:3 120:1,2 135:20 136:10 137:4 140:20,21 145:8,9 152:15

words 30:23 46:24 50:10,25 72:3 95:16 96:14 97:9 110:9 138:3,5 151:19 160:6

work 125:5

works 122:13

world 109:25 110:2

wouldn't 63:8,9,10,11 63:12 66:3 108:14 133:25 138:17

write 17:22,25 68:12,23 74:24 94:1 104:20 109:9 146:2 159:21

writing 40:1 41:17 68:11 105:20

written 18:11 36:6 81:3 140:22 146:5

wrong 70:13 115:14

wrote 9:12

X

X 119:23

Y

Y 119:24

yeah 7:11 11:12 21:25 24:4 34:15 40:9 55:21 56:10 85:21 95:6 98:9 104:18 106:4 115:20 121:1 126:23 154:4,7 160:12,25 161:3

years 67:2 71:18 72:9 74:25 93:13 111:5 113:12

Yep 6:14 106:7

Z

Zoom 4:8 5:18 6:10,18 6:20,24 7:14

0

1

1 3:5 15:5,9,12,14 17:23 22:20 25:25 33:18 35:7 36:9 38:19,23 41:2 50:8,9 53:9 70:24 77:23 78:19 80:8 84:25 85:5,10,11 86:1,7 87:9,11,16 88:5 91:6 117:21 119:1 126:15 144:8 146:20,23 156:17,20

1:19 122:21,23

10 3:11 79:13 92:15,17 99:10,10 101:18 103:12

10,063,761 3:6,10 9:15 27:19 31:4

10:24 56:19

10:31 56:20,22

103 3:12

106 3:12

11 3:12 78:15 103:12,16 103:17,20 104:5

11,153,472 3:6,10 9:16 28:15 31:4 57:5

110 3:13

112 74:18 75:3 76:21 79:18,24 81:1,22 82:3 82:10 87:20 88:1,20 89:2,8,14,20,22 90:3 90:18,19 91:2,10,16 91:25 92:4

116 47:17 48:8,24 49:18 50:20 51:6,17 52:9,16

117 3:14 111:8

12 3:12 11:15 39:2,6,7,9 39:13 42:25 43:5,14 44:15 78:13 103:12 105:24 106:2,5,11

12:29 122:18,20

123 3:15

12a 39:23

12b 39:23

12c 40:3

12d 40:8,9

12e 40:8,14

12f 40:17 43:24 44:10

12g 40:23 44:10

12h 54:10,14,16

12i 41:21

12j 42:2

12k 42:11

12t 42:11 43:24

12th 33:21 38:18

13 3:13 103:13 110:18 110:19,20,23

14 1:14 3:14 78:18 103:13 117:2,5,19 119:1 120:2,8,15 121:11

142 8:19

14th 4:10 161:13

15 3:5,14 19:24,24 20:3 74:10 75:13 93:13 123:1,15,17

154 3:3

16 77:23

164 149:20

165 19:24 20:3

166 20:8,10,23 21:6

168 36:10

17 139:20

171 36:12

175 91:5,7

18 22:21,24 27:15 29:3 29:22 33:18 35:6 37:2 37:4,17 38:19,22 111:15,17 112:3,20

19 91:8

19-10-25 3:11

1980s 61:21

1996 150:23

1999 104:17

2

2 3:6 31:16,20,25 33:3 71:9,13 72:23 85:15 85:25 86:2 106:18,18 107:5 125:12 144:8 150:8,12,14 155:5

2:13 154:17,19

2:20 154:20,22

2:30 161:14,17

20 71:18 72:9

2005 8:19 27:3,12 58:8 58:9 60:14 61:7 62:6 62:10,25 63:22 64:9 64:18 65:7,7 94:8,10 94:17 95:3,5,7 98:1 98:12 99:2 105:4,15 110:12 113:21 114:4 115:8 116:16 118:9 118:11,13,18 120:3,7 122:2,4 126:4,11,13 127:21,23 130:25 131:3,12,24 132:15 134:5,11 150:21

2009 94:16 95:5,15 110:13 117:16 120:6

201 15:20 20:10,11,23 21:6

2014 94:6

2015 78:2,16

2019 84:21 85:2,13 86:9 111:12

2022 33:22 38:18 42:4

2025 1:14 4:11 10:1,6 35:4,6 104:17 161:14

203 15:20 72:5

205 25:16,18

206 71:12

206-623-7580 2:12

208 72:25

20th 10:5 35:6

21 86:1

22 86:1

220 72:19

222 72:19

224 72:18

23-02-02 3:7

24 26:12,12 139:19
24th 78:2,16
25 45:12 78:13 86:2
25th 84:21 85:2,13 86:8
26 18:6 19:7 86:3 139:19
278 148:25 149:19
2900 2:11
2nd 42:4

3

3 3:6 56:25 57:9 106:19 107:5,5 108:13 139:11,15 144:9 150:8,12,14 156:14
30 47:16 50:4 148:9
31 3:6
32 139:14
332 2:5
338 148:25 149:19
34 78:18
35 74:17 75:3 79:18,24 87:20 88:1,19 89:2,20 90:18
36 74:11,15 75:13 78:8 112:4
38 3:7 75:13
3rd 10:1 35:4

4

4 3:7 31:25 38:2,6 39:3 39:23 42:12 43:1 44:10 45:10,20 46:1,6 47:16 48:9 50:5,20 51:8 52:10 53:11,17 53:21 54:2,9 55:9,17 55:24 71:6,9 78:12 86:19 103:12 106:19 135:3 144:9 148:6 149:13
4,951,079 146:25
4:20 154:11
41 148:22 149:11,16
42 149:11,16
44 149:21 150:2
45 150:15
46 77:25 152:18,21,24 153:6
47 78:6 152:19,21,24 153:7
472 10:25 28:24 32:25 33:1 40:15 50:9,13,15 85:12 86:2,3,9 87:4 88:7,11,17 89:15,23 90:4,17 91:14,16 92:1 92:10 139:16 140:17 146:19 147:9 156:14 156:21

5

5 3:3,7 50:9 57:13,15,17 57:20 86:3 103:12 143:6,6 158:5,25
50 84:25
53 112:7
54 85:9,11
55 146:20,23
57 3:6,8
58 85:8,9,11,17,18,22
5th 111:12

6

6 3:8 70:7,9,15 74:18 75:3 76:21 79:19,25 81:1,22 82:4,10 86:3 86:19 87:21 88:2,20 89:3,8,15,21 103:12
6,021,278 146:25
6,101,338 146:25
6:24-CV-270-AM-DTG 1:9 4:7
60 85:1,4 146:20
60604 2:6
61 86:11
62 87:12,15
63 85:4 86:12 87:9
66 106:19
67 45:11,21,25 46:15
6b 120:19,24,25 121:4,9

7

7 3:9 22:20 70:14,16,20 71:3,7 75:16 76:3 86:23 93:4,6 103:12
7,555,006 3:9
70 3:8,9
702 12:12
761 10:24 28:23 32:8 40:10,13 50:9,12 78:1 82:20,22 147:14 155:5
77 3:10
774-484-3285 2:6
7B 93:6,11
7C 93:7,11

8

8 3:9 77:10,15 78:11 93:6 103:12
8,243,045 3:14
8,508,498 3:8
8,726,043 3:12
8,838,370 3:11
8,847,898 3:13
80 19:16,19
83 45:21,25 46:15
84 3:11 47:17 48:8,21 48:24 49:18 50:19 51:6,17 52:9,15

9

9 3:10 78:12 84:3,5,7,14 84:20,21 86:19,23 103:12
9,936,116 10:19 40:7
9:01 4:2
9:02 4:11
9:04 6:3
9:05 6:4,6
90-some 66:15
900 2:5
90s 128:25
92 3:11 91:8
925 2:11
95050 8:20
98104 2:12
9th 94:16

C E R T I F I C A T E

This is to certify that the foregoing transcript

Deposition of: Dr. Andrew Wolfe

In the matter of: Cutting Edge Vision v T-Mobile

Before: US District Court

Date: 03-14-25

Place: teleconference

were duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings; and that I am neither counsel for, related to, nor employed by any of the parties to this action in which this deposition was taken; and further that I am not a relative nor an employee of any of the parties nor counsel employed by the parties, and I am not financially or otherwise interested in the outcome of the action.

Neal R Gross

Court Reporter

ERRATA ERRATA

DEPOSITION/TESTIMONY OF:	Dr. Andrew Wolfe		
IN THE MATTER OF:	Cutting Edge Vision, LLC v. T-Mobile US, Inc., and T-Mobile USA, Inc.		
DOCKET NO.:	6:24-cv-270	TAKEN ON:	Friday, March 14, 2025

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PAGE #	LINE #	CHANGE	REASON
7	9	from "don't" to "won't"	typographical/transcription error
13	4	from "admit" to "omit"	typographical/transcription error
76	19	from "implying" to "applying"	typographical/transcription error
133	25	from "wouldn't be" to "would be"	typographical/transcription error
140	3	from "into context" to "in context"	typographical/transcription error
146	5	from "than in written" to "when written in"	typographical/transcription error

PAGE #	LINE #	CHANGE	REASON

PAGE #	LINE #	CHANGE	REASON

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